

FIG. I

EXAMPLE 1 (PARALLEL DIRECTION)

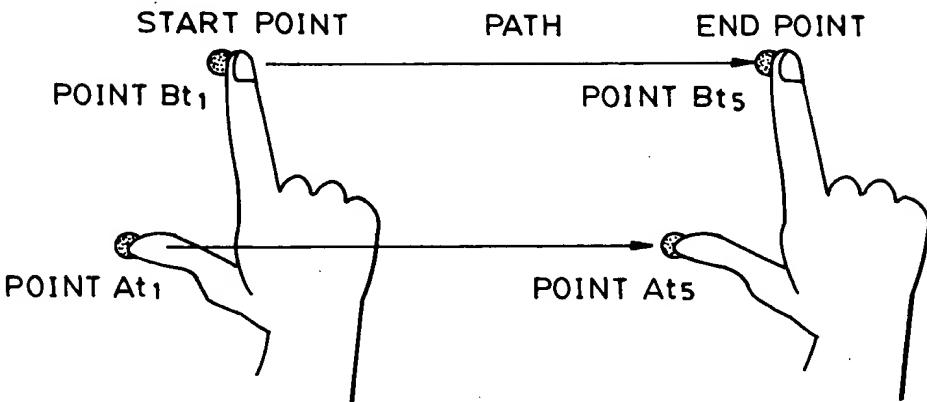


FIG. 2A

EXAMPLE 2 (INWARD DIRECTION)

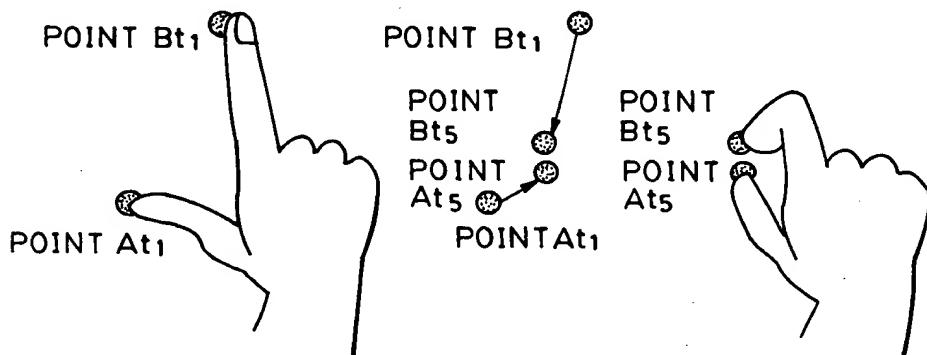


FIG. 2B

EXAMPLE 3 (OUTWARD DIRECTION)

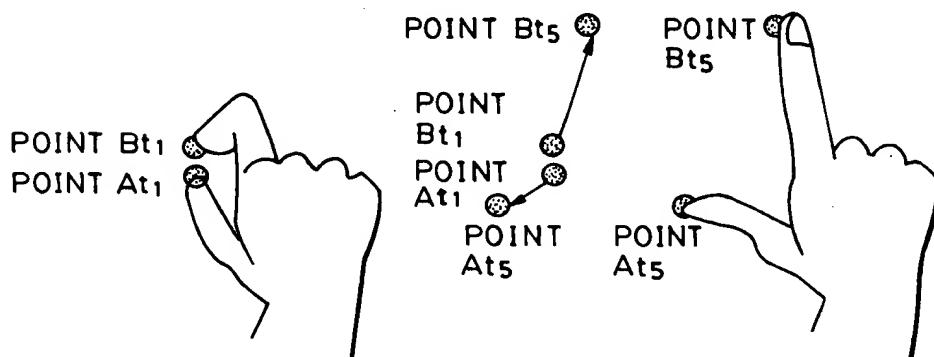


FIG. 2C

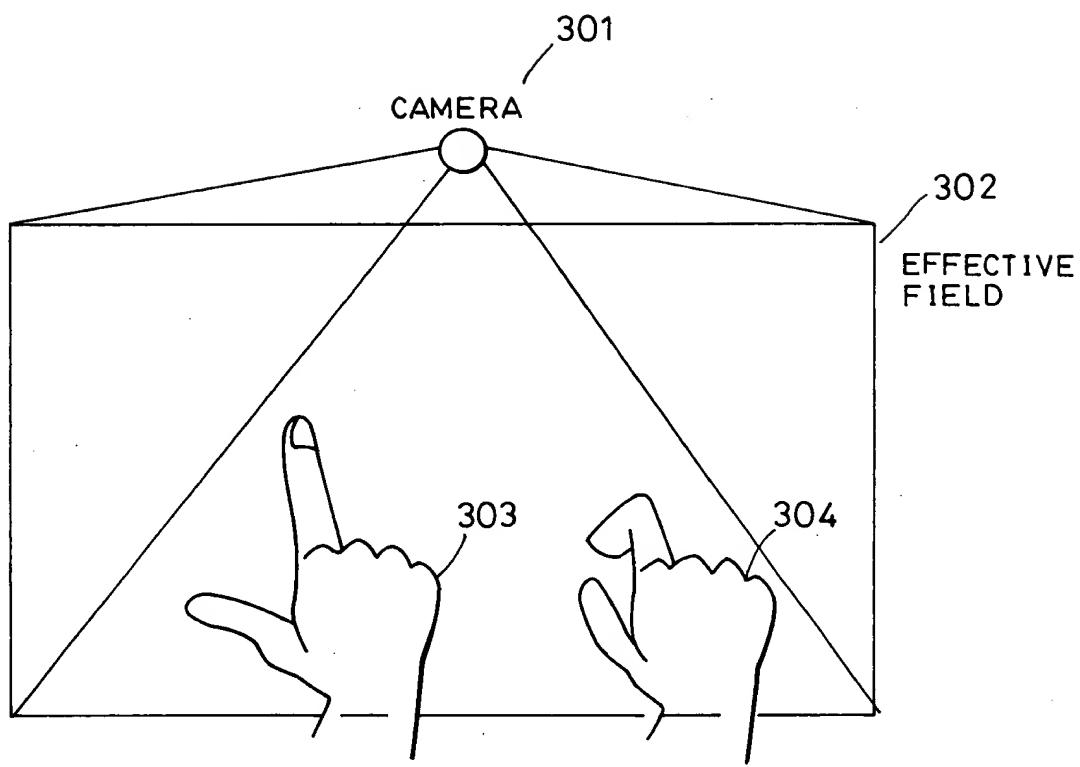


FIG. 3

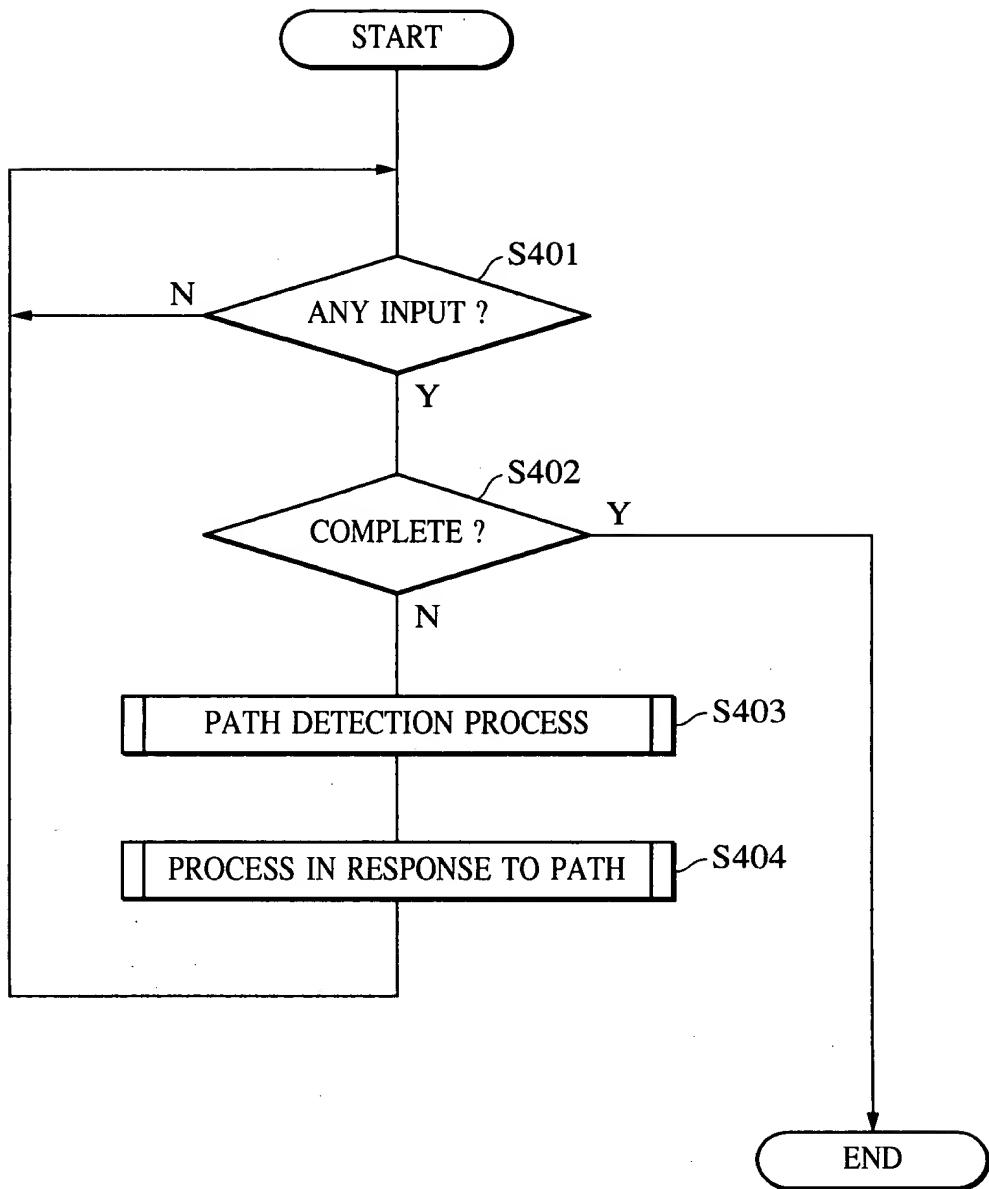


FIG. 4

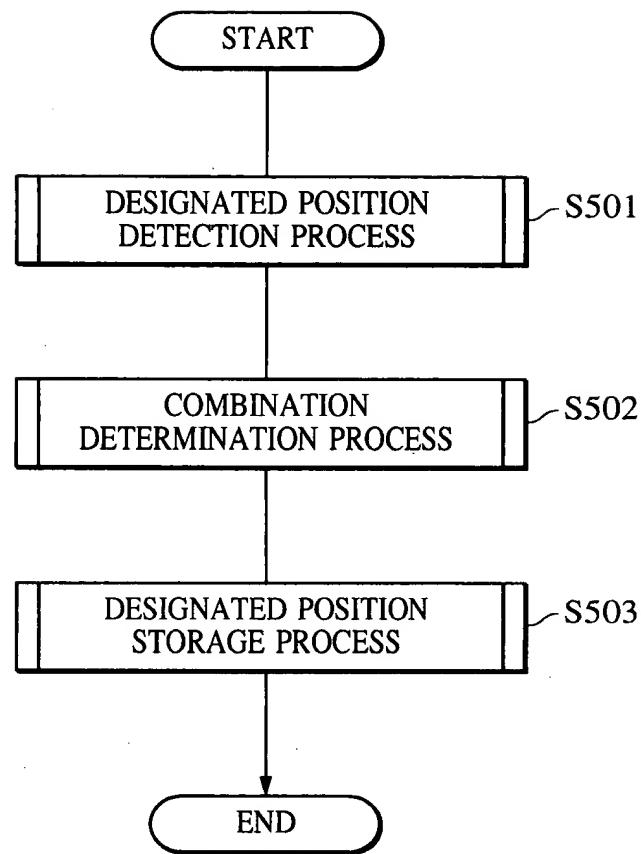


FIG. 5

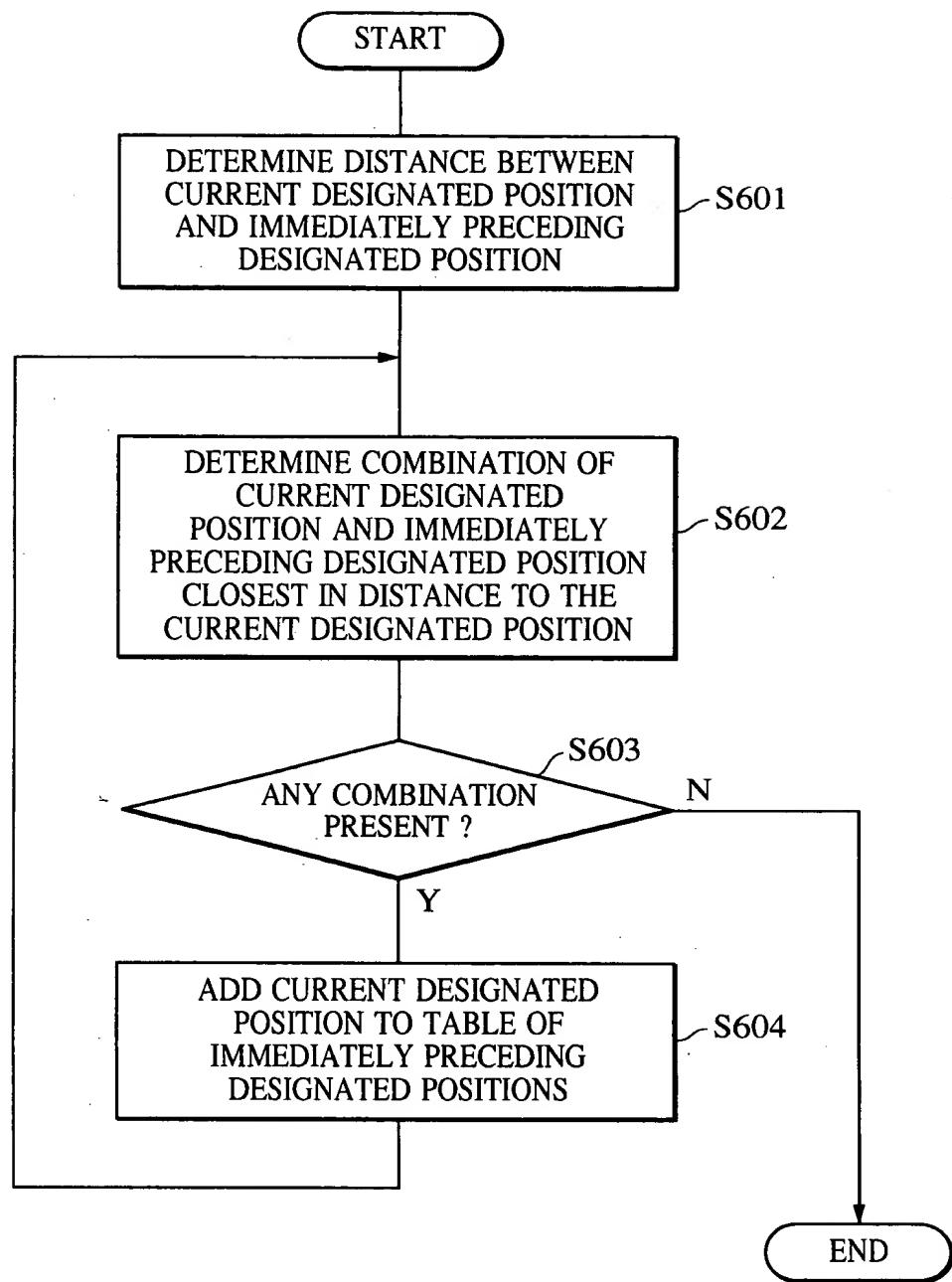


FIG. 6

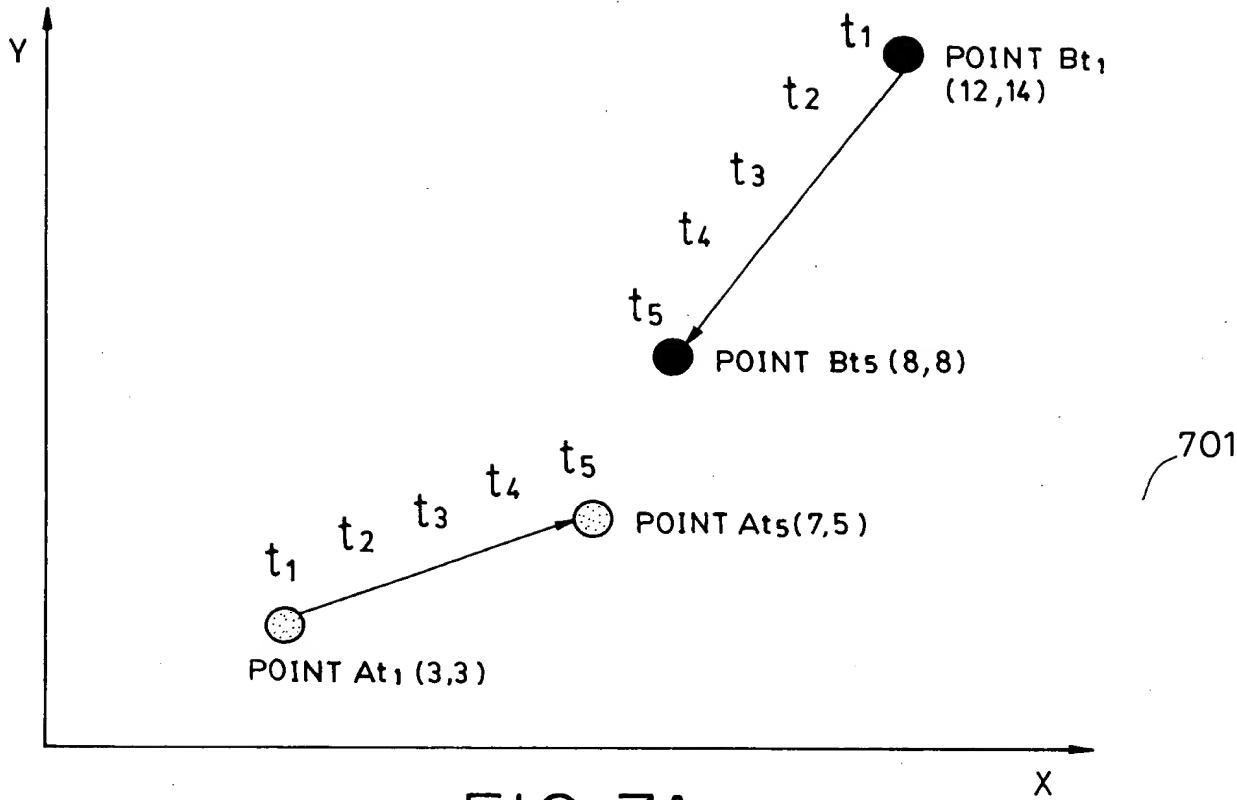


FIG. 7A

TABLE STORING POSITION DATA

POSITION COORDINATE
DATA AT POINT A

	X	Y
t ₁	3	3
t ₂	4	3.5
t ₃	5	4
t ₄	6	4.5
t ₅	7	5

702

POSITION COORDINATE
DATA AT POINT B

	X	Y
t ₁	12	14
t ₂	11	12.5
t ₃	10	11
t ₄	9	10
t ₅	8	9

703

FIG. 7B

FIG. 7C

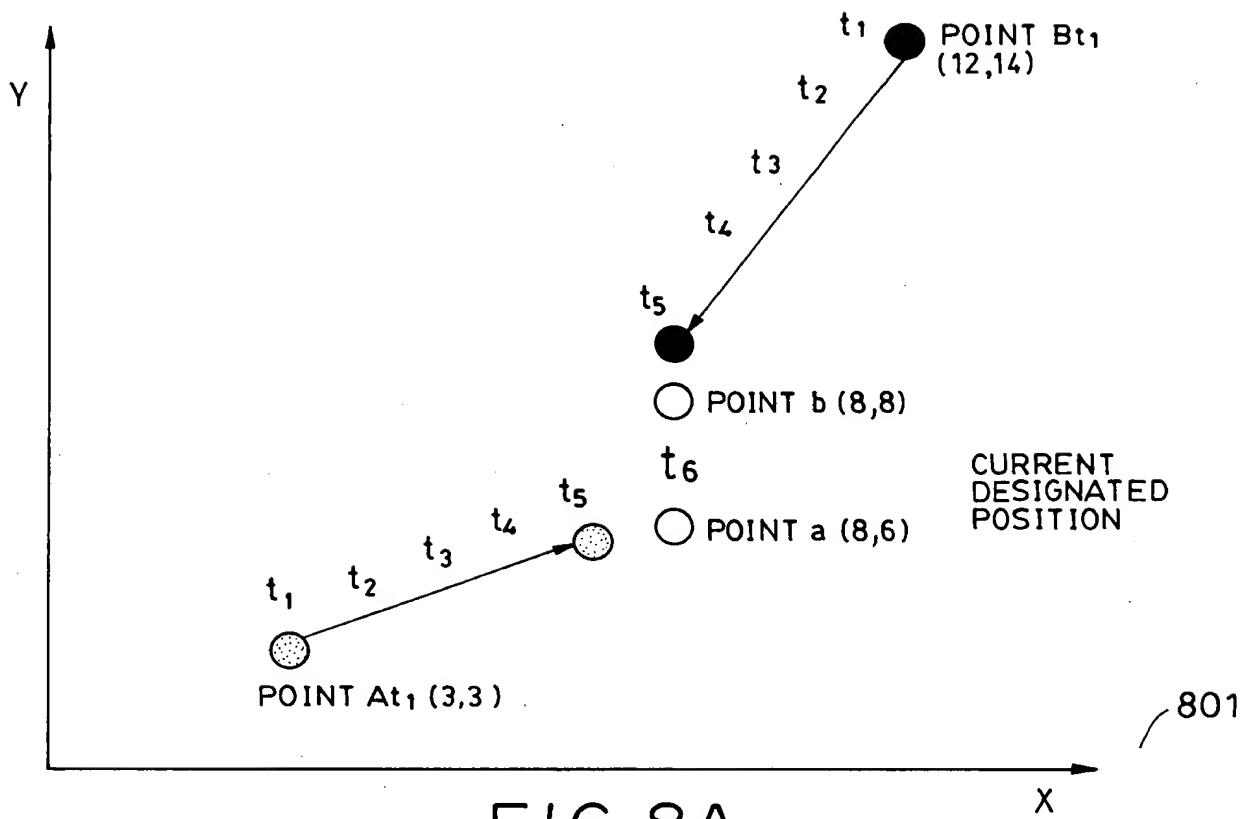


FIG. 8A

CURRENT DESIGNATED POSITION DATA (AT t_6)

	X	Y
a	8	6
b	8	8

802

801

FIG. 8B

CURRENT DESIGNATED POSITION DATA

	X	Y
a	8	6
b	8	8

FIG. 9A



DISTANCE TO IMMEDIATELY PRECEDING DESIGNATED POSITION

	X	Y	DISTANCE TO DESIGNATED POSITION A	DISTANCE TO DESIGNATED POSITION B
a	8	6	1.414	4.123
b	8	8	3.601	1.000

FIG. 9B



DESIGNATED POSITION DATA AT EACH TIME POINT

	X	Y
t ₁	3	3
t ₂	4	3.5
t ₃	5	4
t ₄	6	4.5
t ₅	7	5
t ₆	8	6

FIG. 9C

903

	X	Y
t ₁	12	14
t ₂	11	12.5
t ₃	10	11
t ₄	9	10
t ₅	8	9
t ₆	8	8

FIG. 9D

904

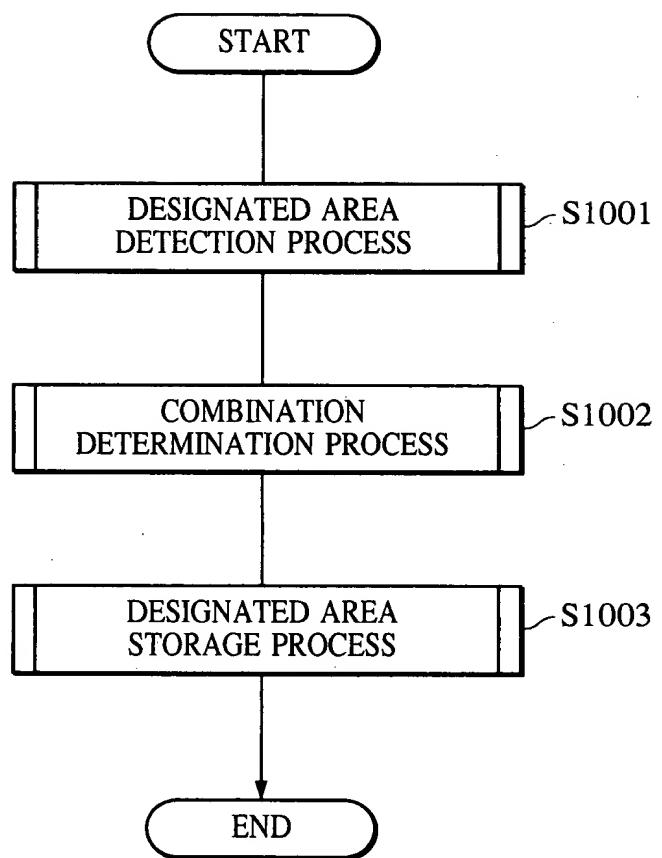


FIG. 10

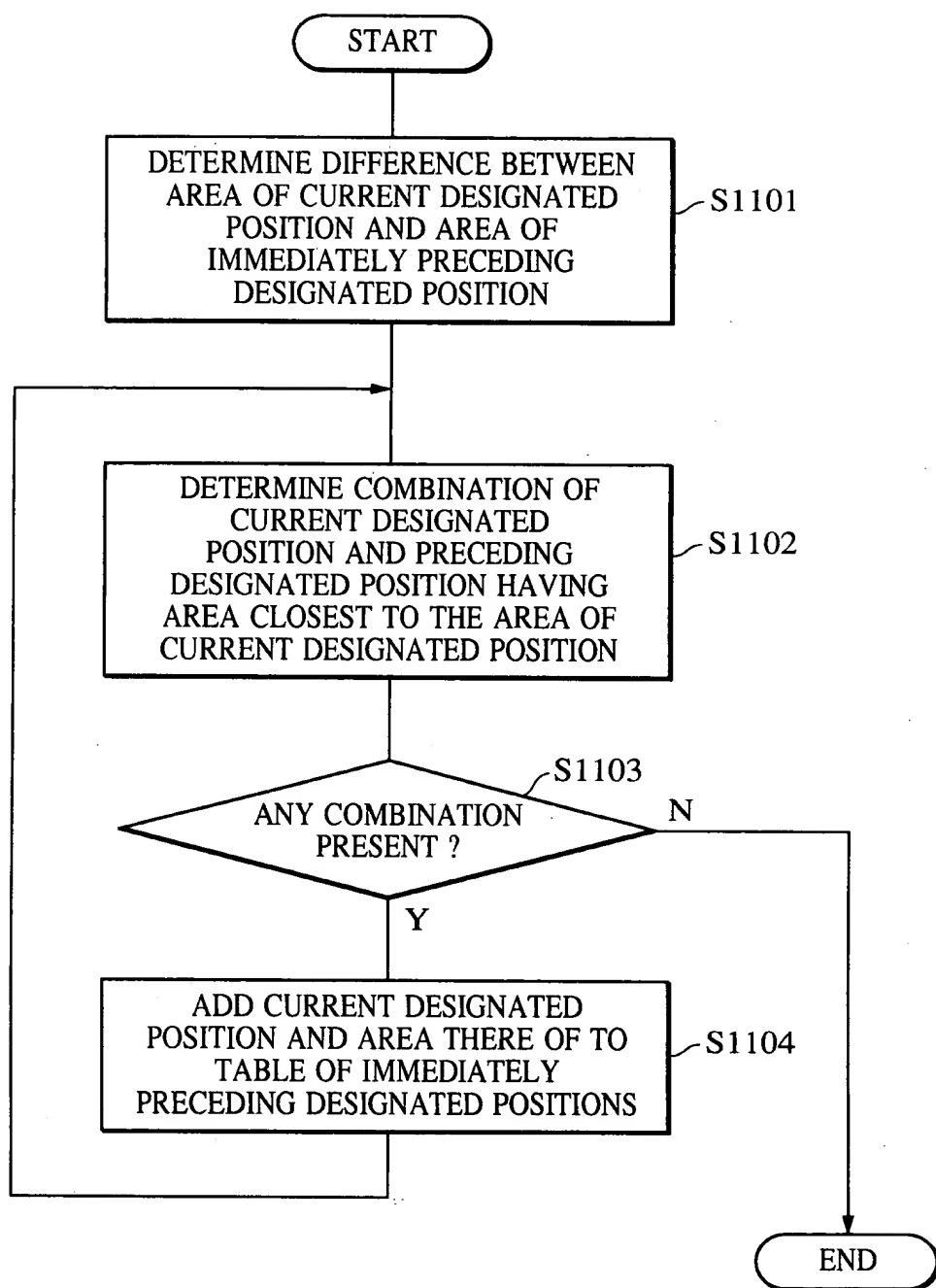


FIG. 11

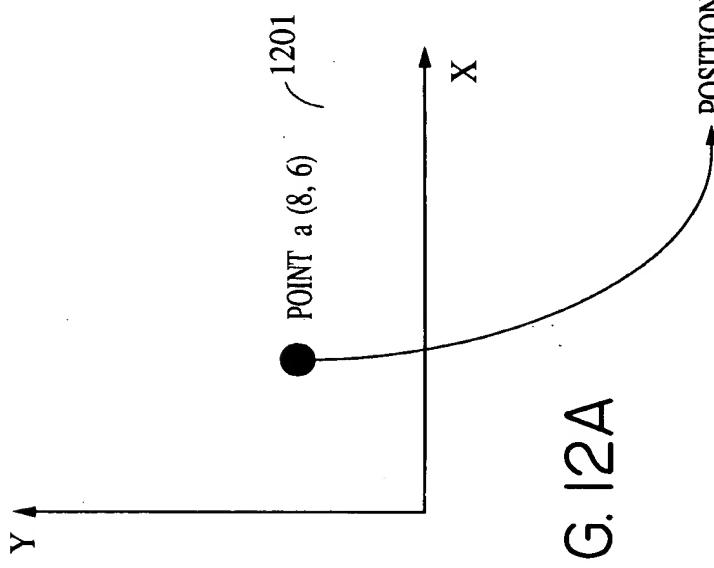


FIG. I2A

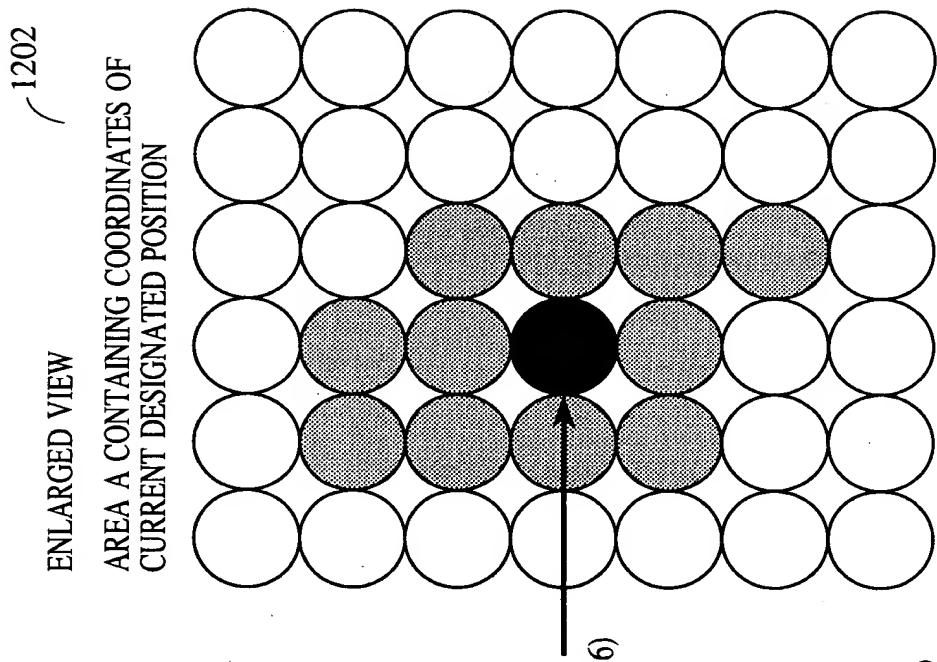


FIG. I2B

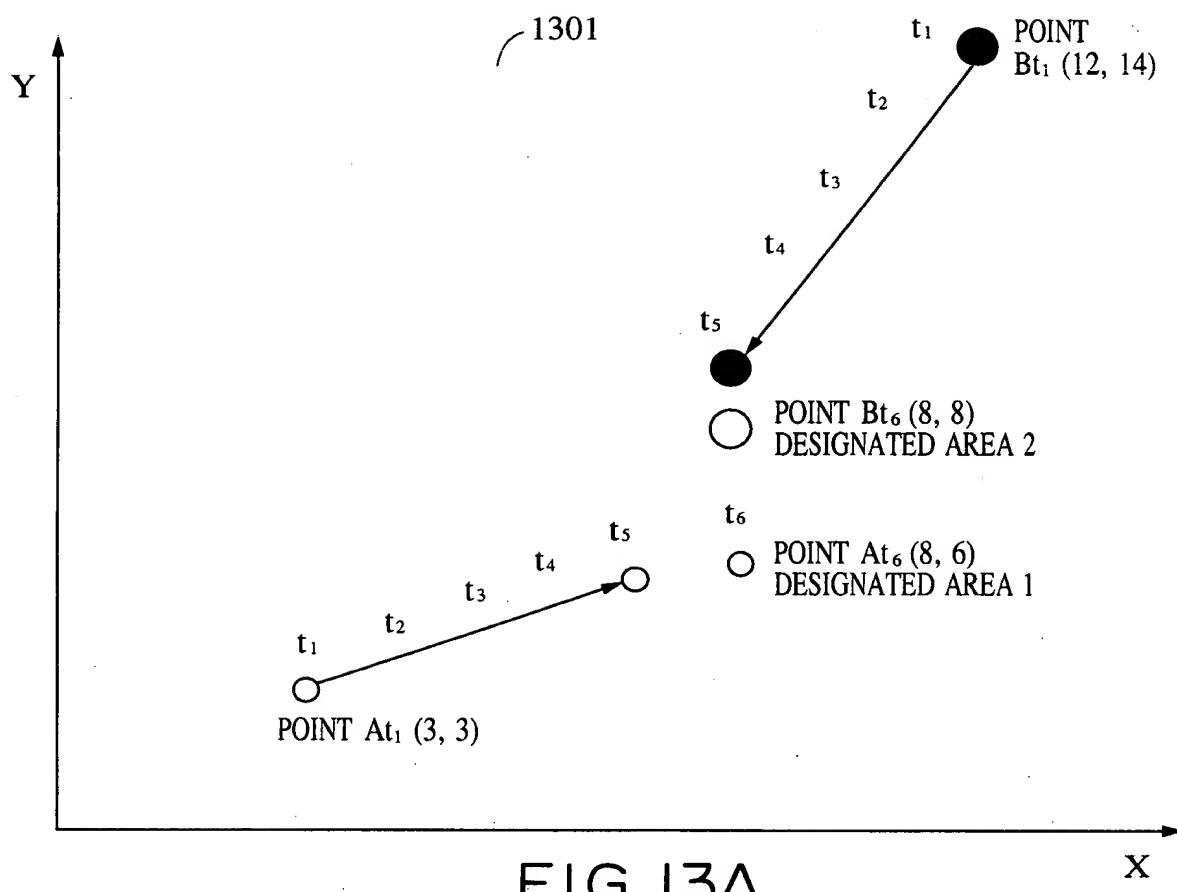


FIG. 13A

TABLES STORING DESIGNATED AREA DATA

AREA DATA AT POINT A

	X	Y	AREA
t_1	3	3	12.5
t_2	4	3.5	12.2
t_3	5	4	12.5
t_4	6	4.5	12.0
t_5	7	5	11.0

FIG. 13B

AREA DATA AT POINT B

	X	Y	AREA
t_1	12	14	19.5
t_2	11	12.5	19.5
t_3	10	11	20.0
t_4	9	10	20.0
t_5	8	9	20.0

FIG. 13C

CURRENT DESIGNATED AREA DATA (AT t_6)

1304

	X	Y	AREA
a	8	6	11.5
b	8	8	20.0

FIG. 13D

CURRENT AREA DATA (AT t_6)

	X	Y	AREA
a	8	6	11.5
b	8	8	20.0

1401

FIG. 14A



DIFFERENCE BETWEEN CURRENT AND IMMEDIATELY
PRECEDING DESIGNATED AREAS

	X	Y	AREA	DIFFERENCE FROM DESIGNATED AREA A	DIFFERENCE FROM DESIGNATED AREA B
a	8	6	11.5	0.5	9.0
b	8	8	20.0	9.0	0.5

1402

FIG. 14B



TABLES STORING DESIGNATED AREA DATA

	X	Y	AREA
t_1	3	3	12.5
t_2	4	3.5	12.2
t_3	5	4	12.5
t_4	6	4.5	12.0
t_5	7	5	11.0
t_6	8	6	11.5

1403

	X	Y	AREA
t_1	12	14	19.5
t_2	11	12.5	19.5
t_3	10	11	20.0
t_4	9	10	20.0
t_5	8	9	20.0
t_6	8	8	20.5

1404

FIG. 14C

FIG. 14D

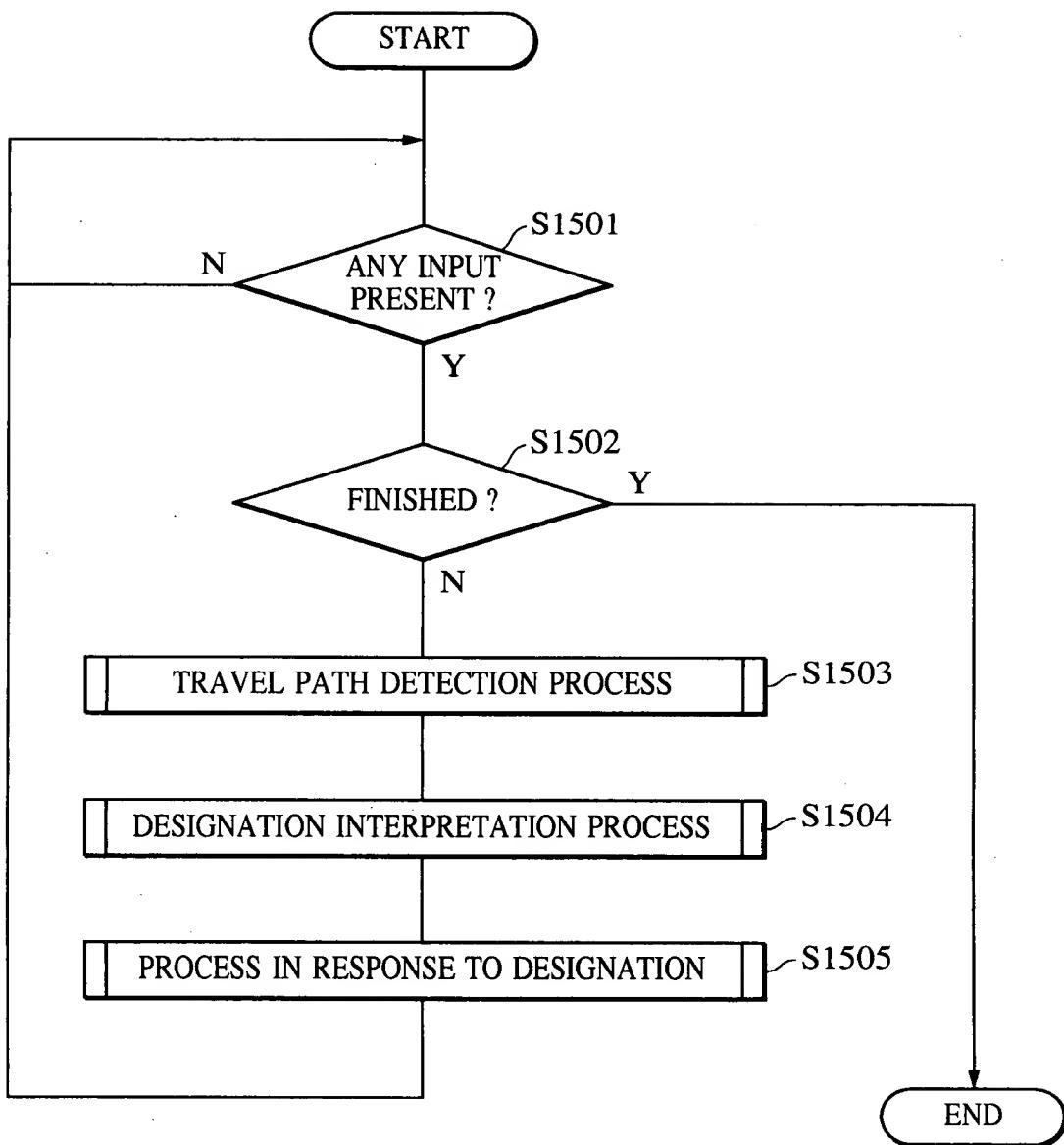


FIG. 15

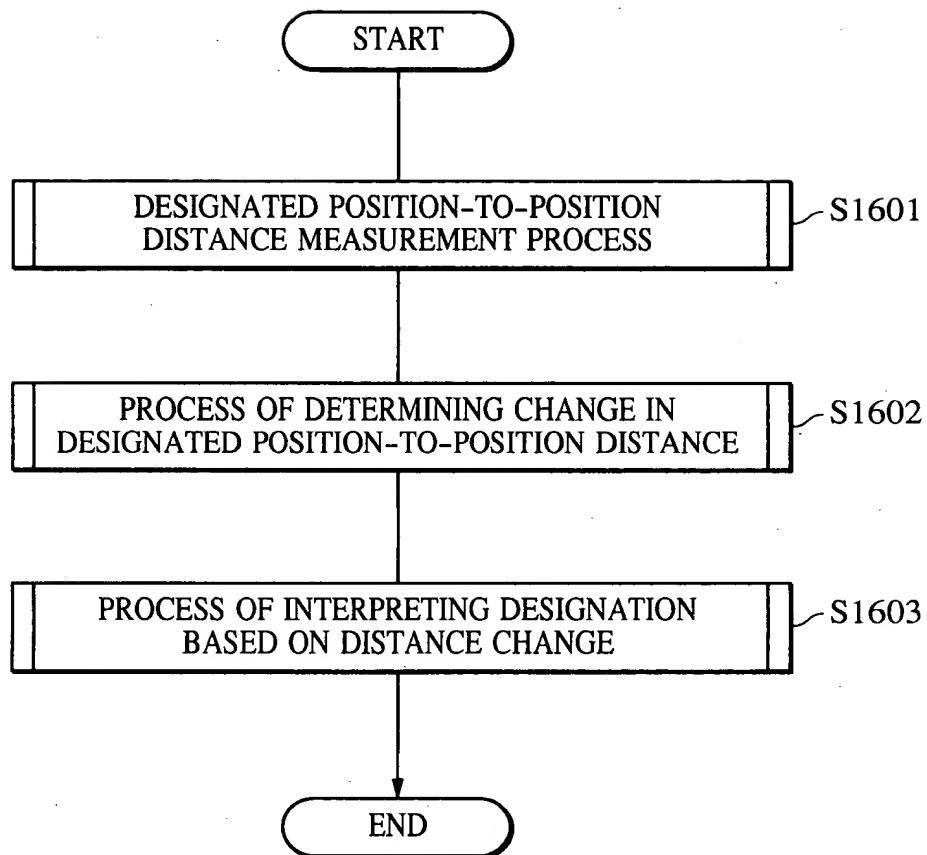


FIG. 16

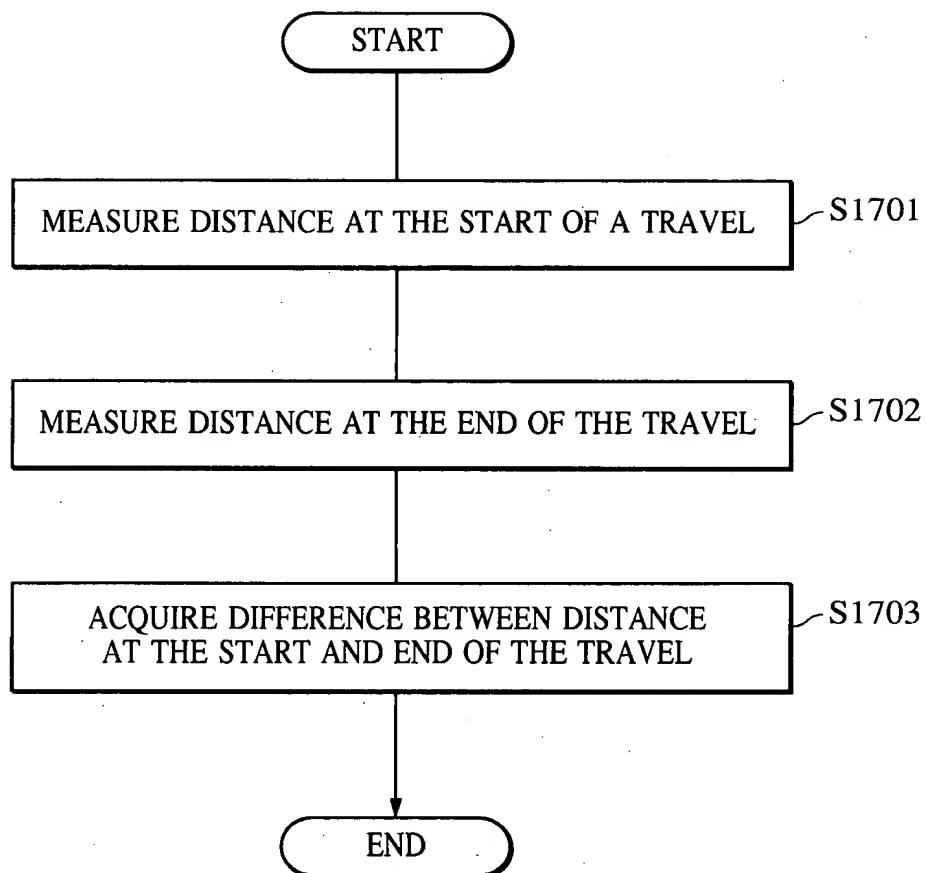


FIG. 17

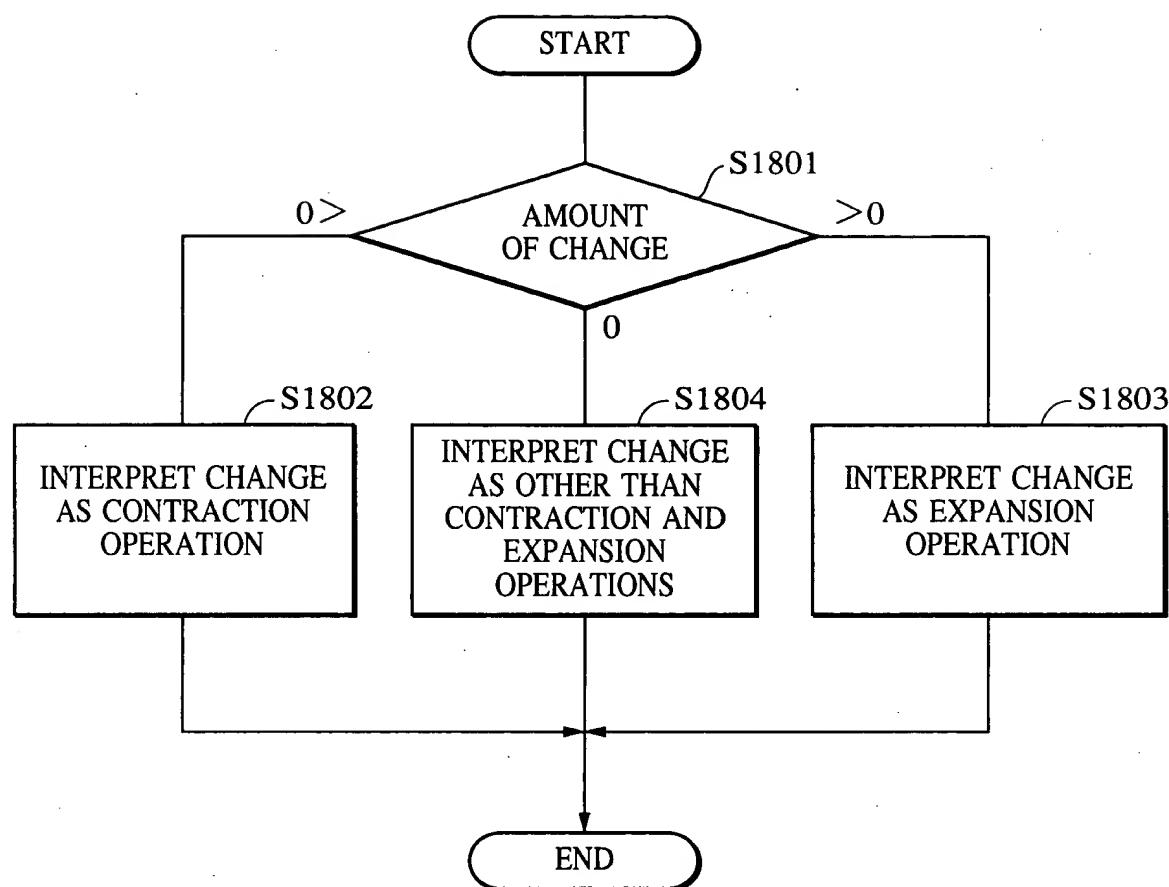
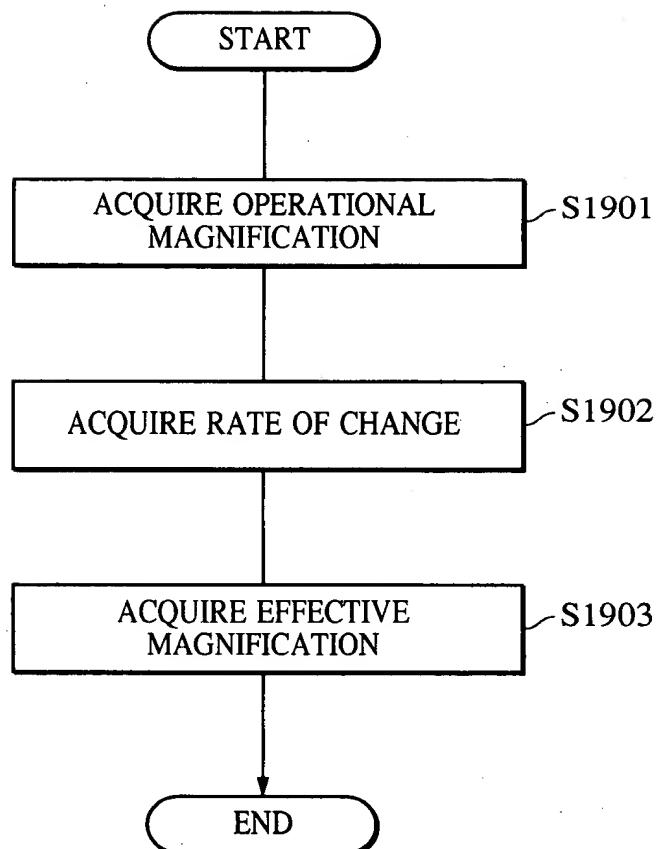


FIG. 18



EFFECTIVE MAGNIFICATION = $100 - (100 - \text{OPERATIONAL MAGNIFICATION}) \times \text{RAGE OF CHANGE } \alpha$

FIG. 19

CONTRACTION OPERATION

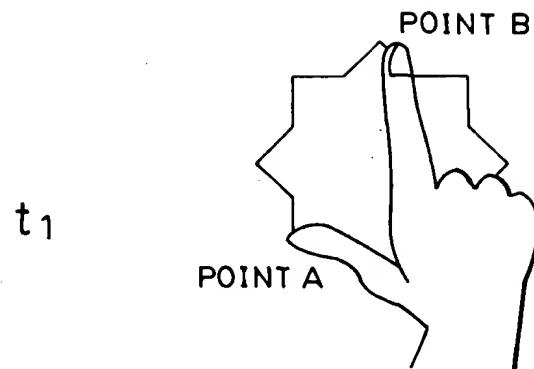


FIG. 20A

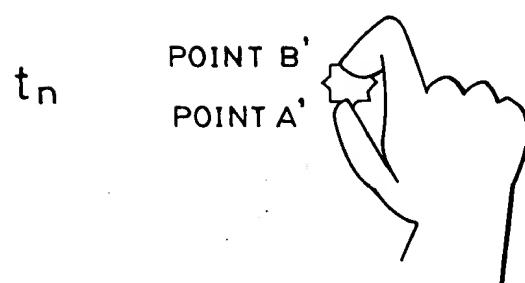


FIG. 20B

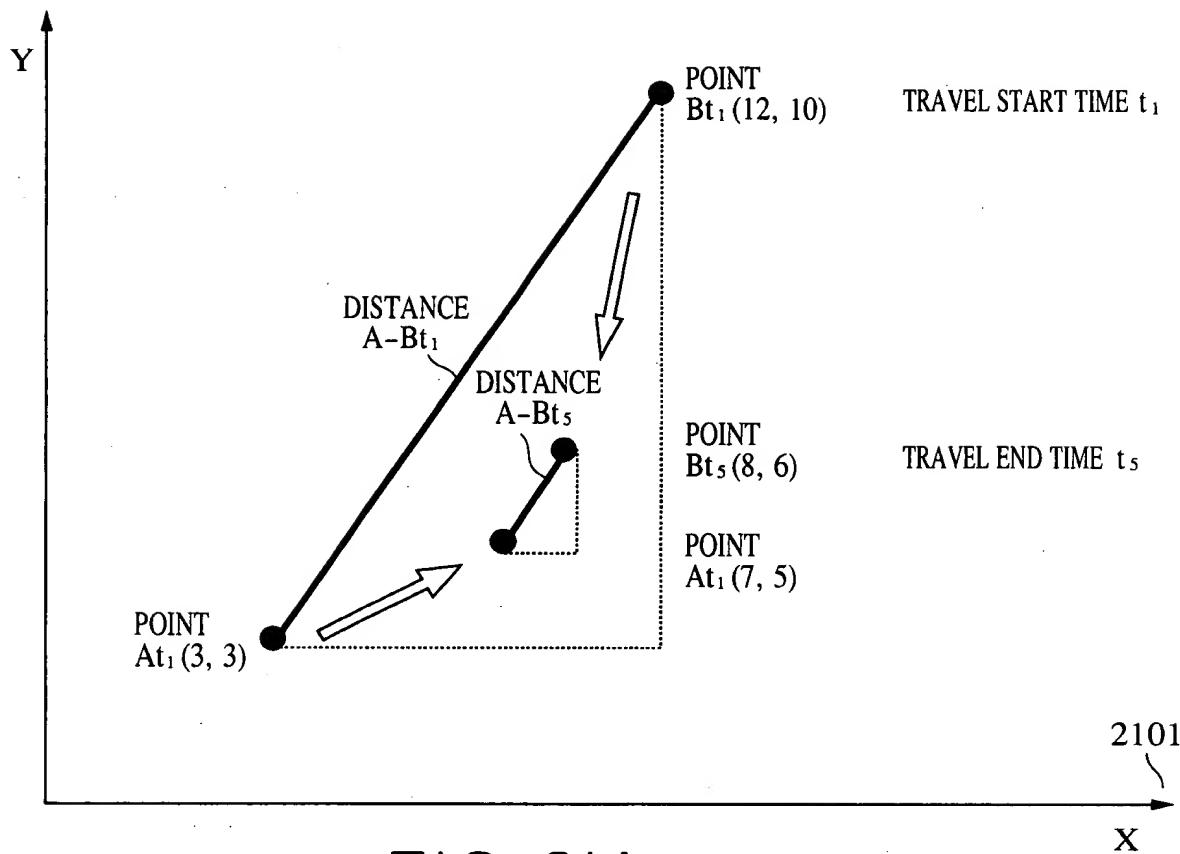


FIG. 2IA

DISTANCE BETWEEN DESIGNATED POSITIONS A AND B,
AND AMOUNT OF CHANGE

	DISTANCE BETWEEN A AND B	MAGNIFICATION (DISTANCE t _n /DISTANCE t ₁)
t ₁	15.000	100%
t ₂	11.011	73%
t ₃	7.810	52%
t ₄	3.905	26%
t ₅	1.118	7%

2102

FIG. 2IB

EXPANSION OPERATION

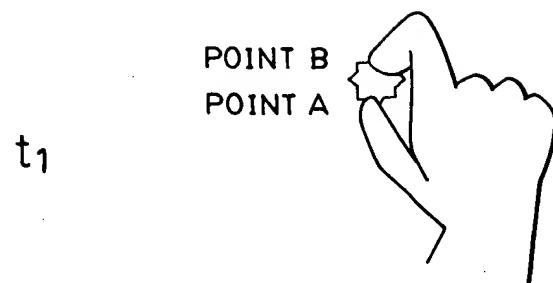


FIG. 22A

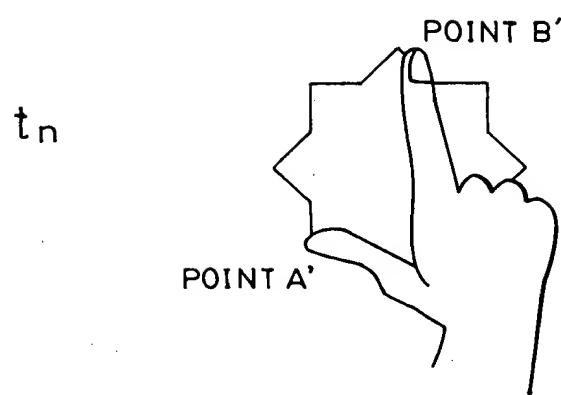


FIG. 22B

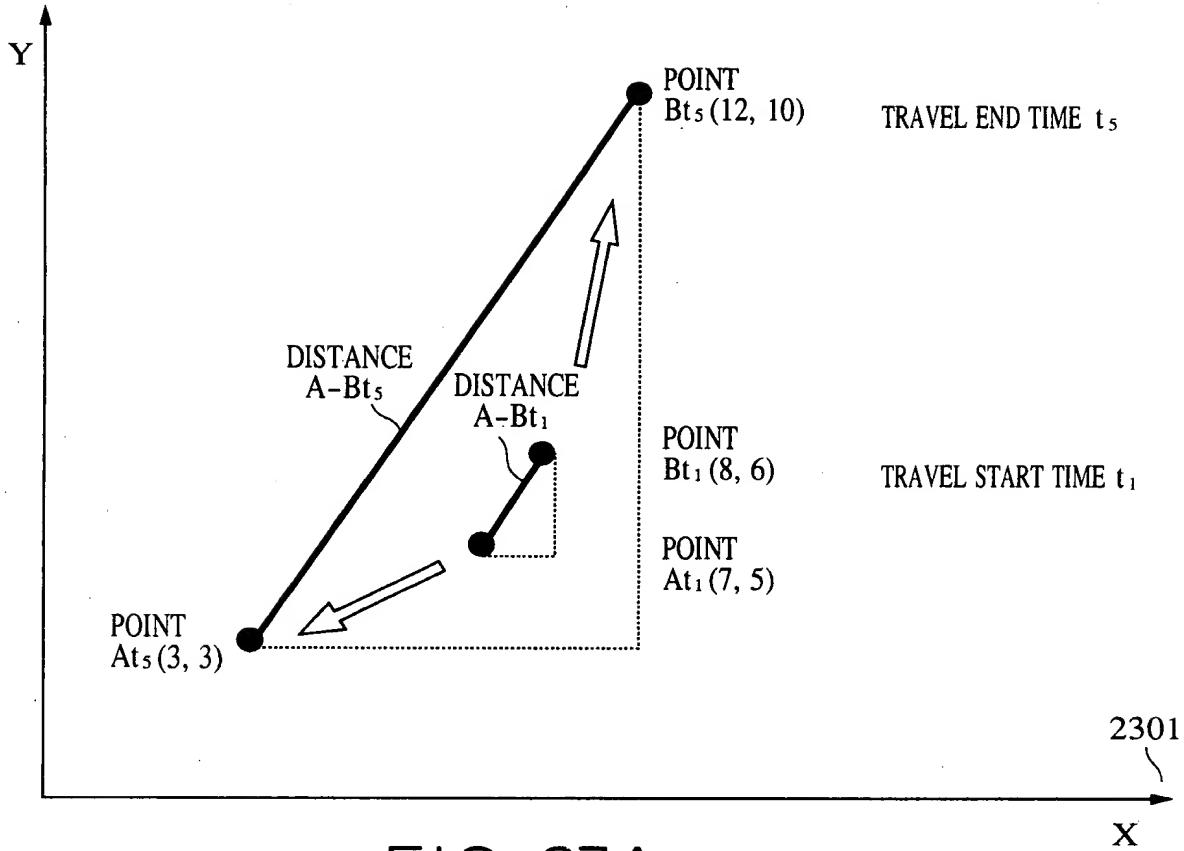


FIG. 23A

DISTANCE BETWEEN DESIGNATED POSITIONS A AND B,
AND AMOUNT OF CHANGE

	DISTANCE BETWEEN A AND B	MAGNIFICATION (DISTANCE t_n /DISTANCE t_1)
t_1	1.118	100%
t_2	4.081	365%
t_3	7.080	633%
t_4	9.552	854%
t_5	11.402	1020%

2302

FIG. 23B

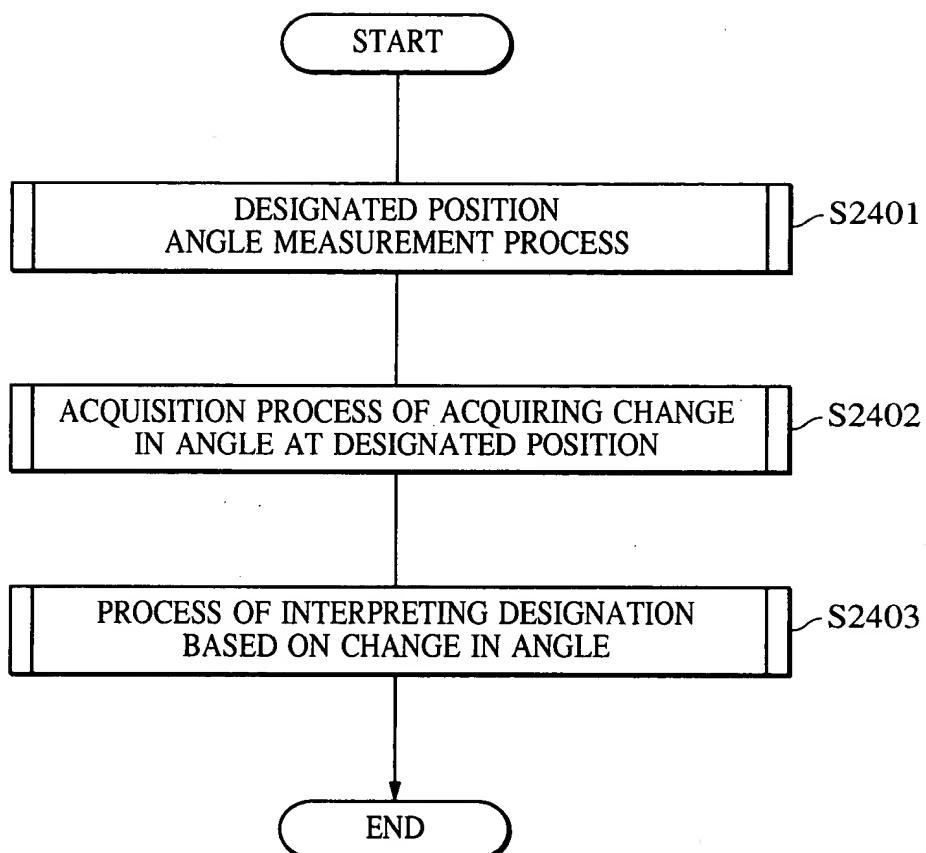


FIG. 24

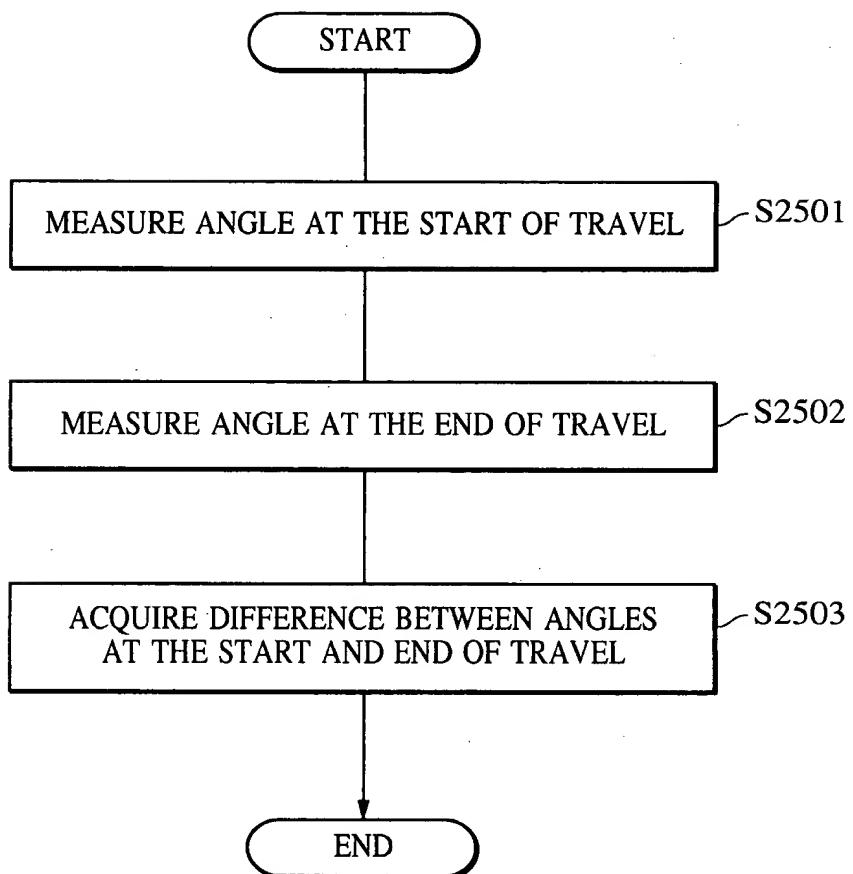


FIG. 25

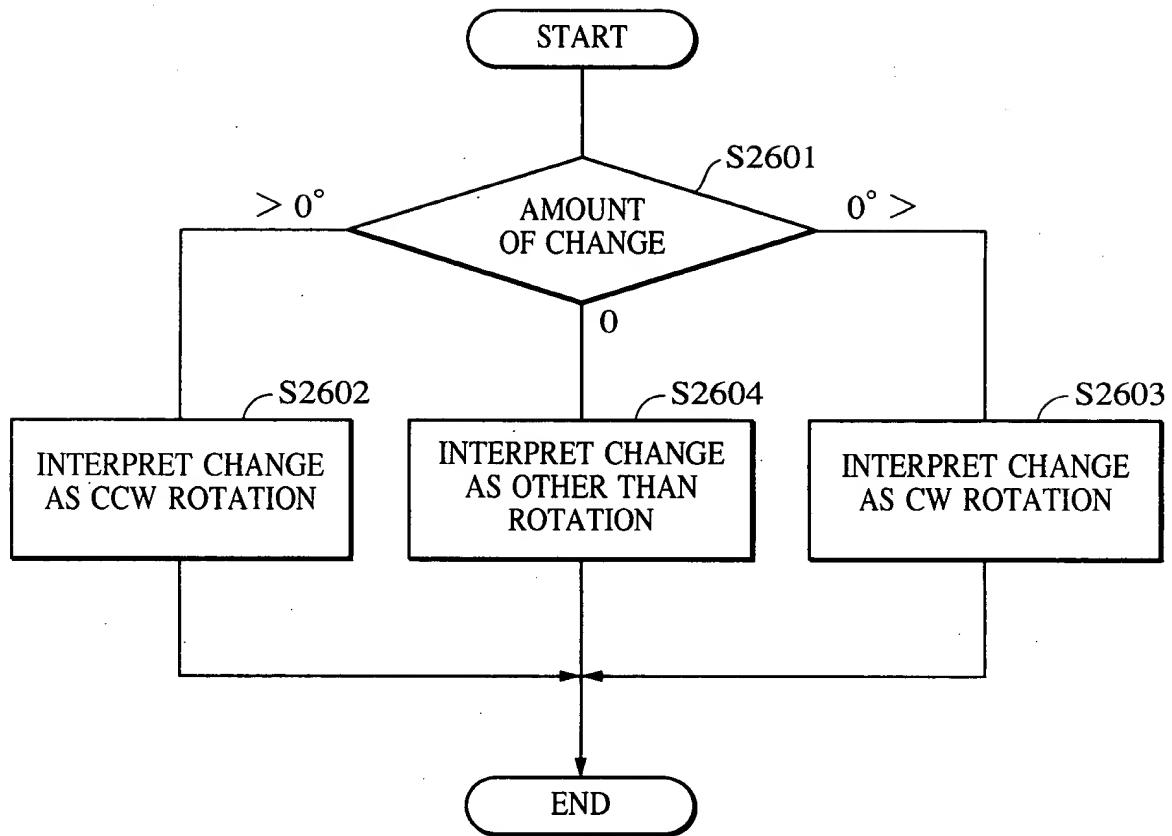


FIG. 26

CW ROTATION

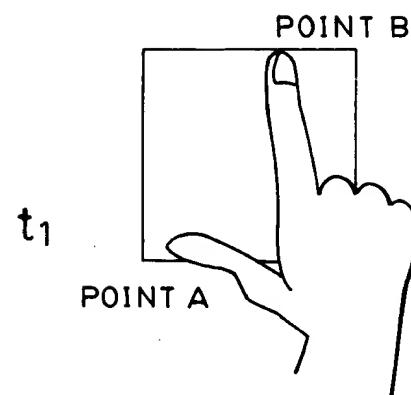


FIG. 27A

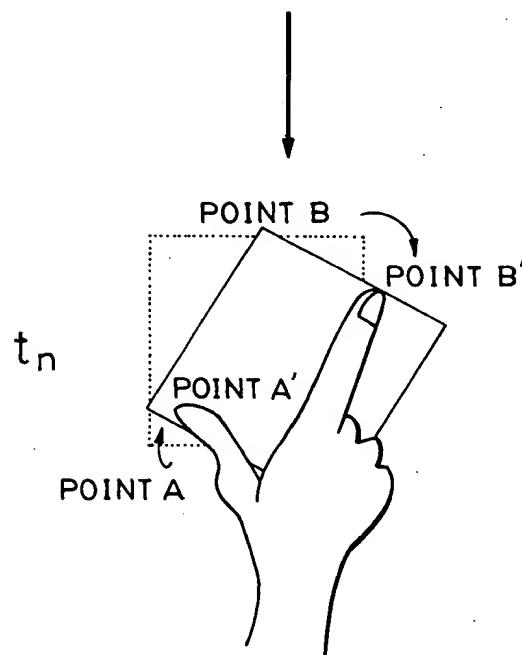


FIG. 27B

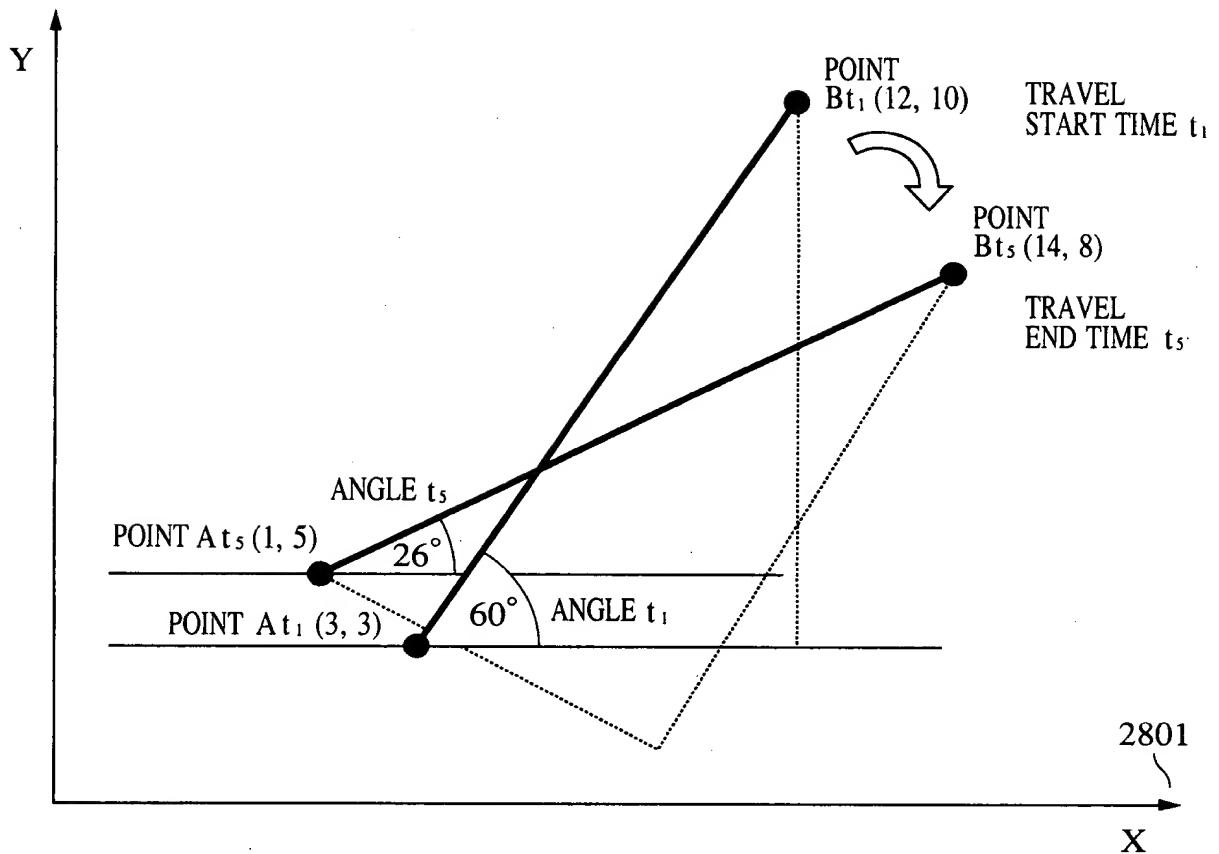


FIG. 28A

ANGLE OF DESIGNATED POSITIONS A AND B,
AND AMOUNT OF CHANGE

	ANGLE OF LINE AB	AMOUNT OF CHANGE ($t_n - t_1$)
t_1	60	0
t_2	49	-11
t_3	40	-20
t_4	33	-27
t_5	26	-34

2802

FIG. 28B

CCW ROTATION

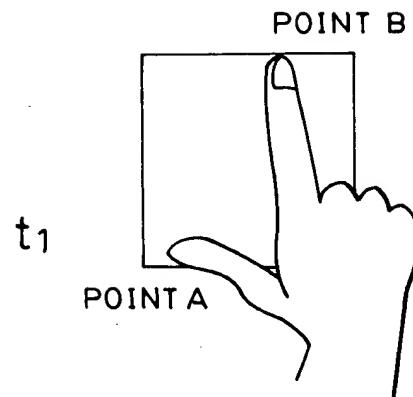


FIG. 29A

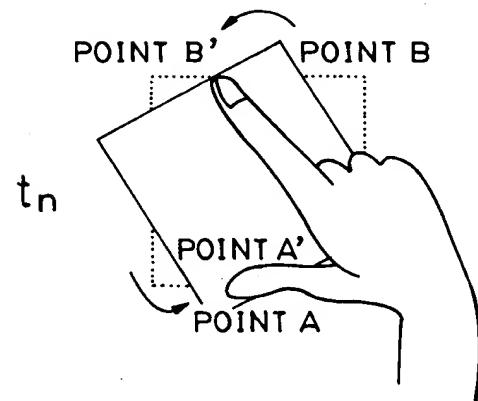


FIG. 29B

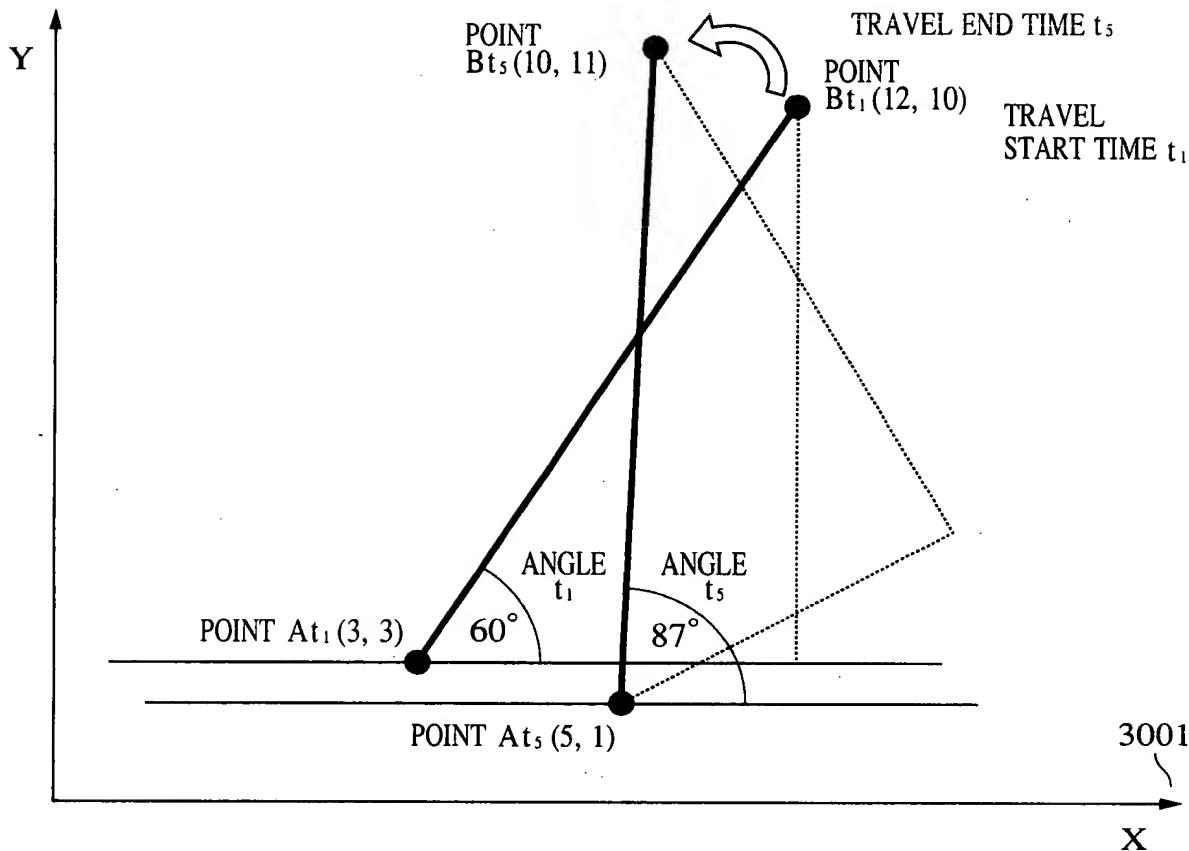


FIG. 30A

ANGLE OF DESIGNATED POSITIONS A AND B,
AND AMOUNT OF CHANGE

	ANGLE OF LINE AB	AMOUNT OF CHANGE ($t_n - t_1$)
t_1	60	0
t_2	65	5
t_3	70	10
t_4	80	20
t_5	87	27

3002

FIG. 30B

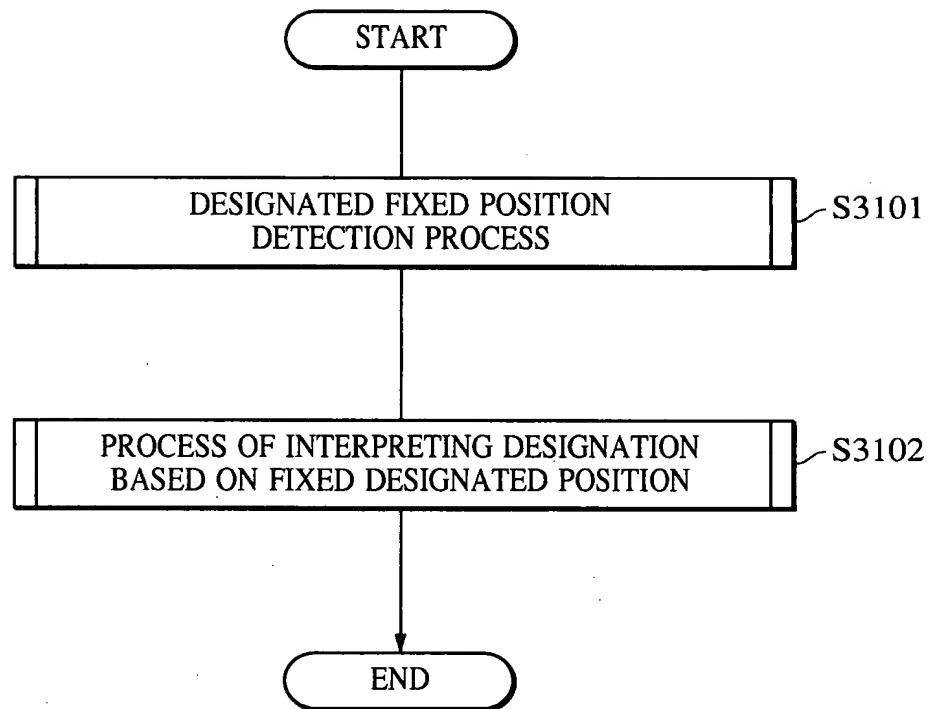


FIG. 31

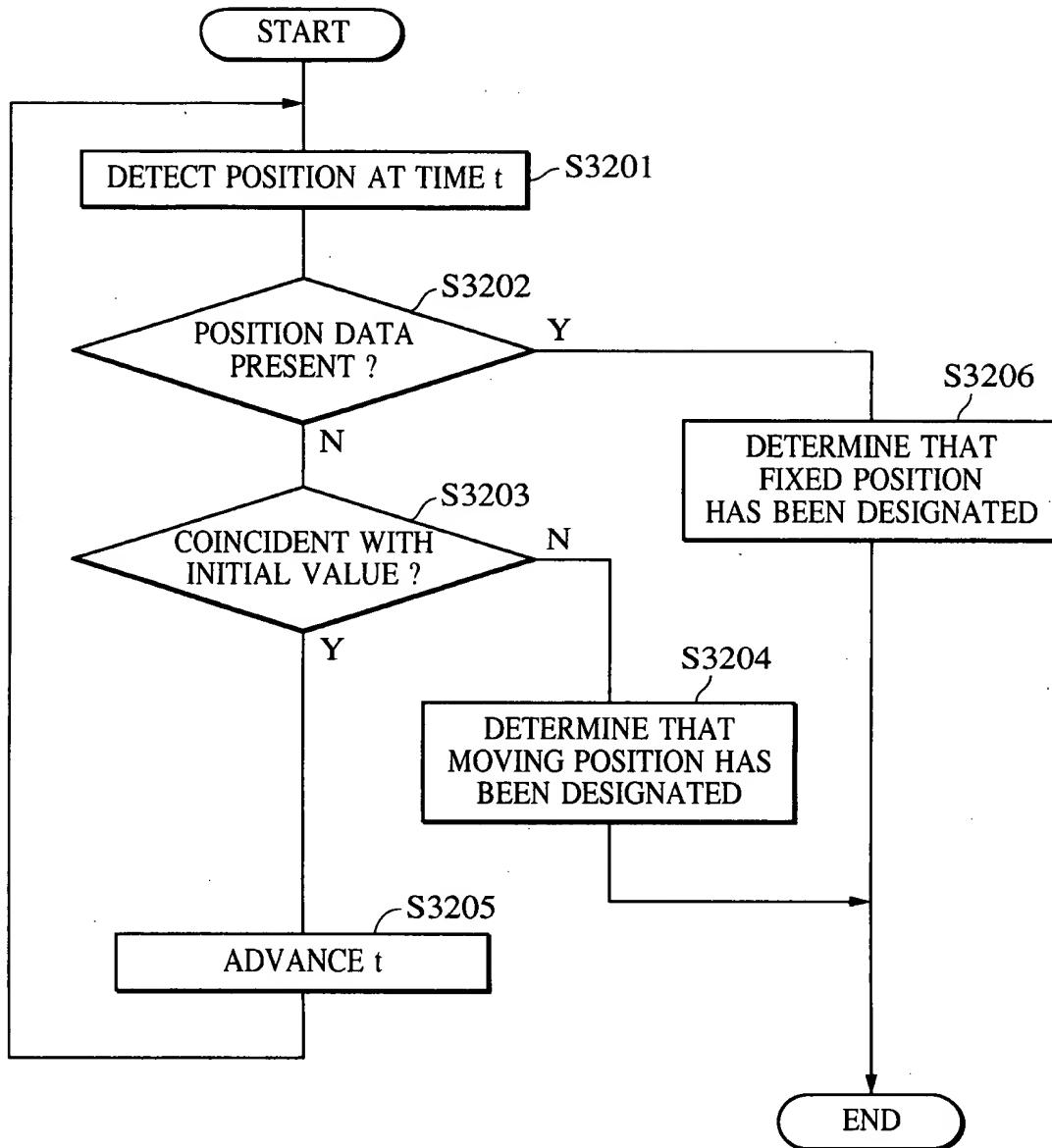


FIG. 32

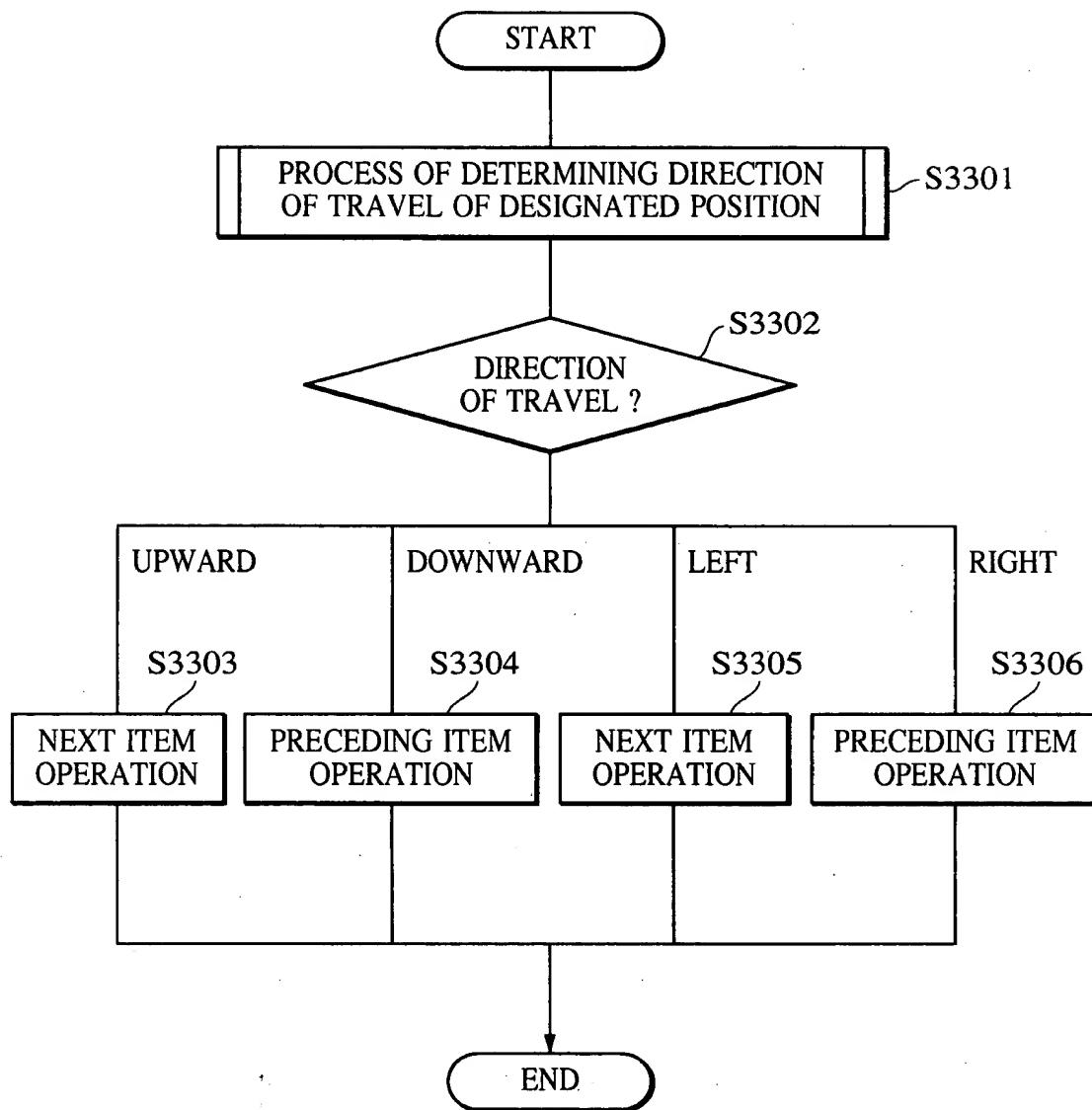


FIG. 33

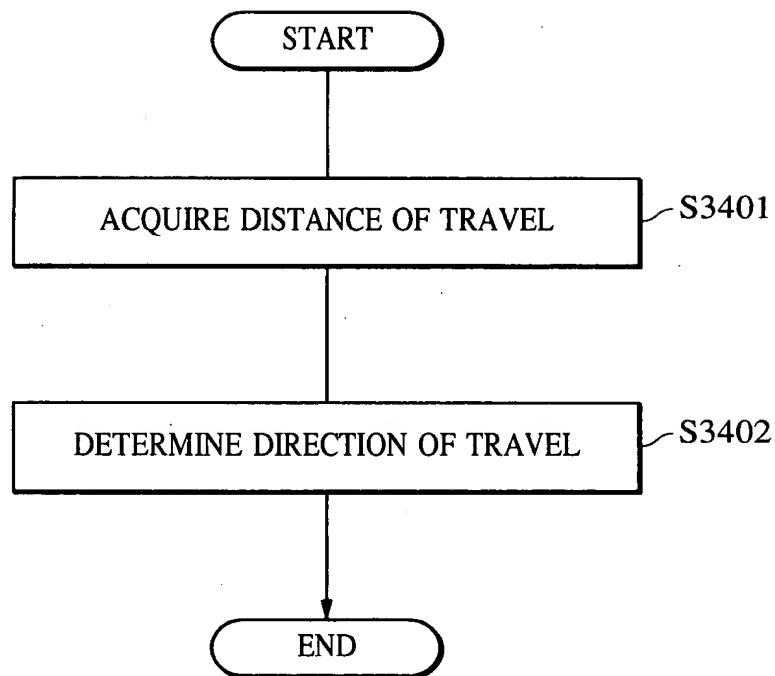


FIG. 34

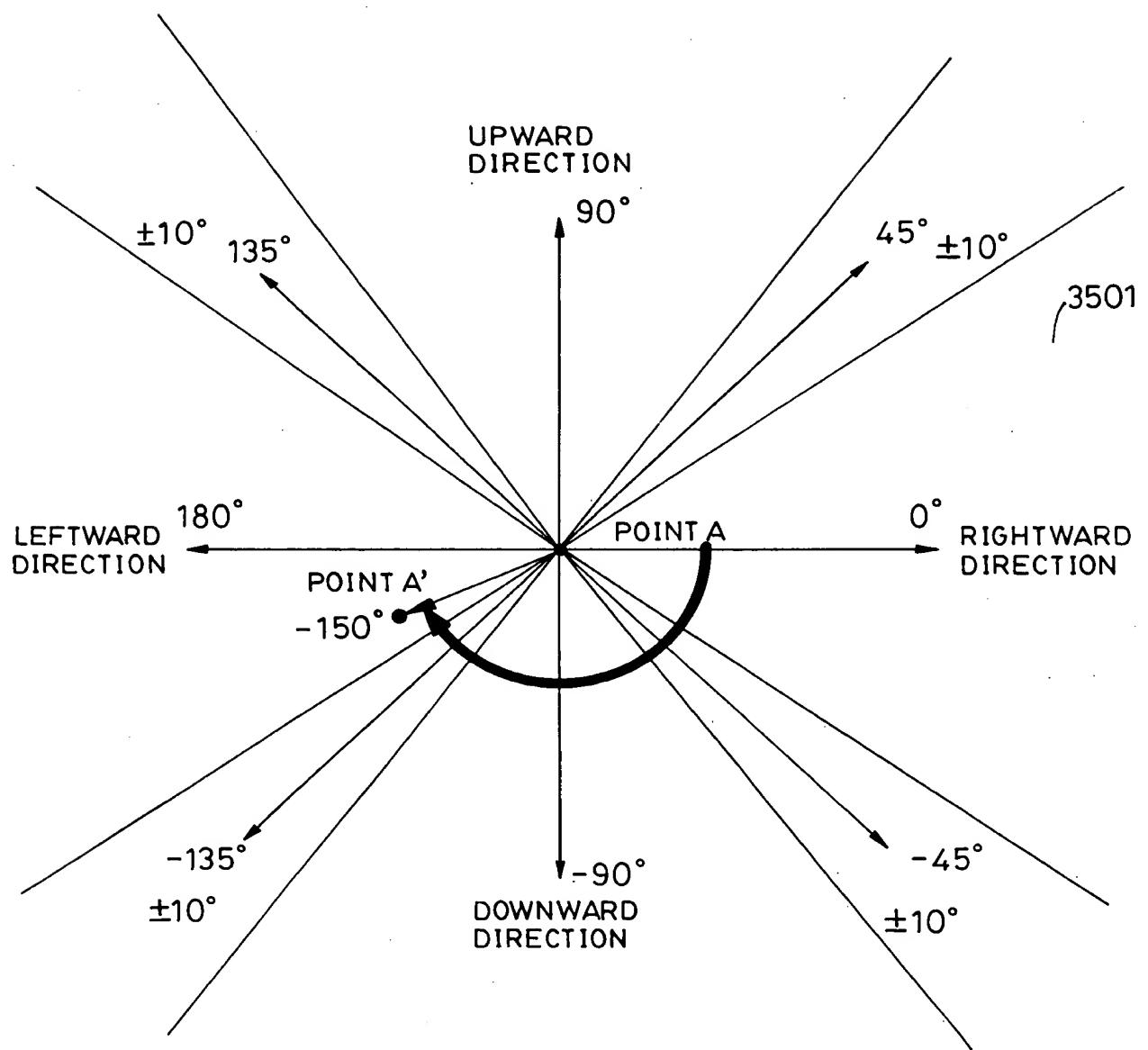


FIG. 35

LEFTWARD TRAVEL

DESIGNATED
FIXED POSITION
(POINT A)

DESIGNATED
MOVING POSITION
(POINT B_{t1})

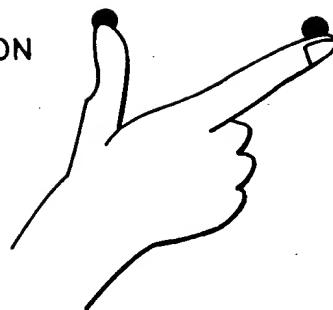


FIG. 36A

DESIGNATED MOVING POSITION
(POINT B_{t5})

LEFTWARD DIRECTION OF TRAVEL

DESIGNATED
FIXED POSITION
(POINT A)

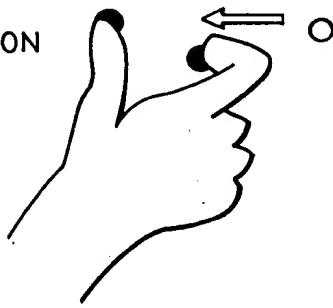


FIG. 36B

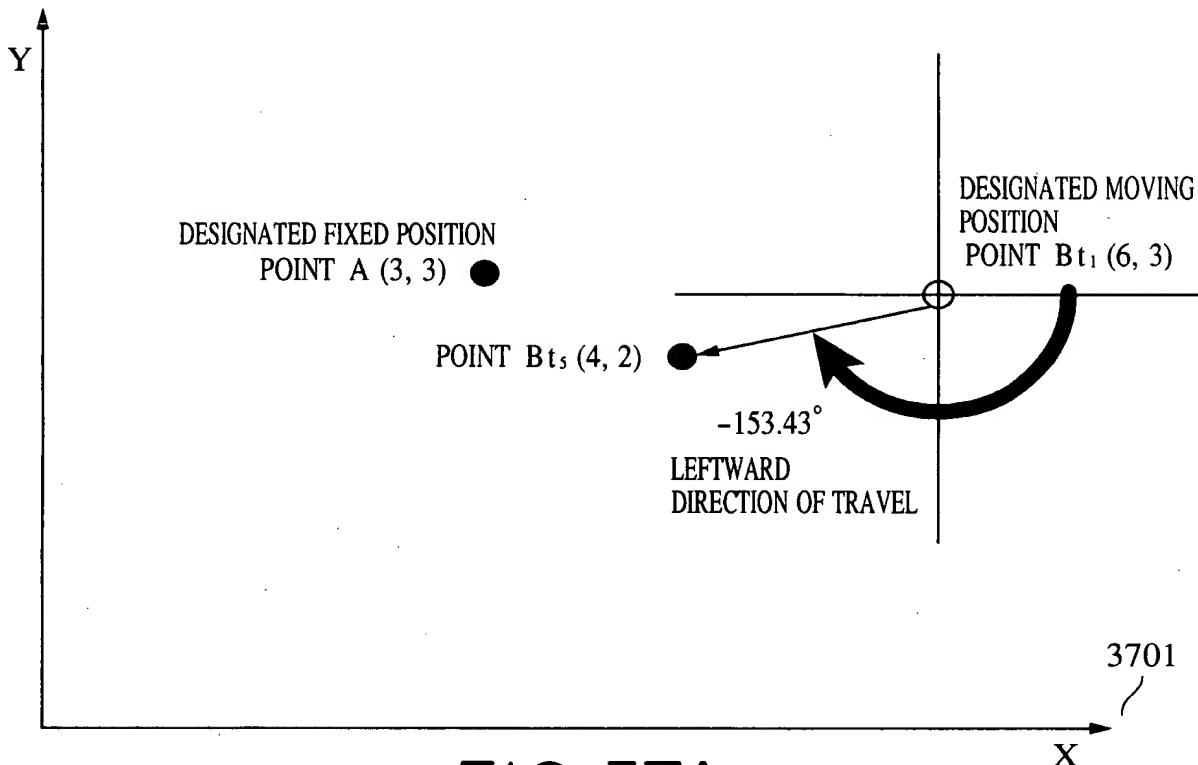


FIG. 37A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _X	A _Y
t ₁	3	3
t ₂	3	3
t ₃	3	3
t ₄	3	3
t ₅	3	3

DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	B _X	B _Y
t ₁	6.0	3.0
t ₂	5.3	2.3
t ₃	4.7	1.7
t ₄	4.3	1.2
t ₅	4.0	2.0

FIG. 37B

FIG. 37C

DESIGNATED POSITION TRAVEL DATA

	TRAVEL OF POINT A	TRAVEL OF POINT B	DIRECTION OF TRAVEL (DEGREES)
t ₁	0.000	0.000	-153.43
t ₂	0.000	0.000	-153.43
t ₃	0.000	1.862	-153.43
t ₄	0.000	2.453	-153.43
t ₅	0.000	2.236	153.43

3703

FIG. 37D

UPWARD TRAVEL

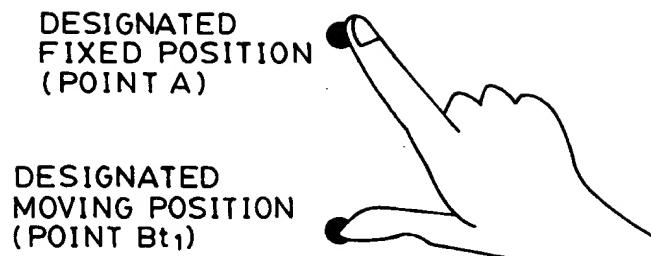


FIG. 38A

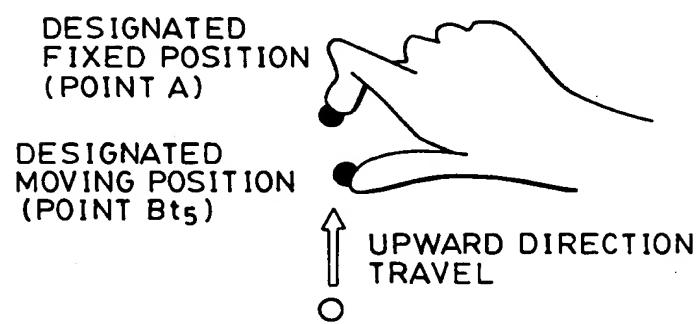


FIG. 38B

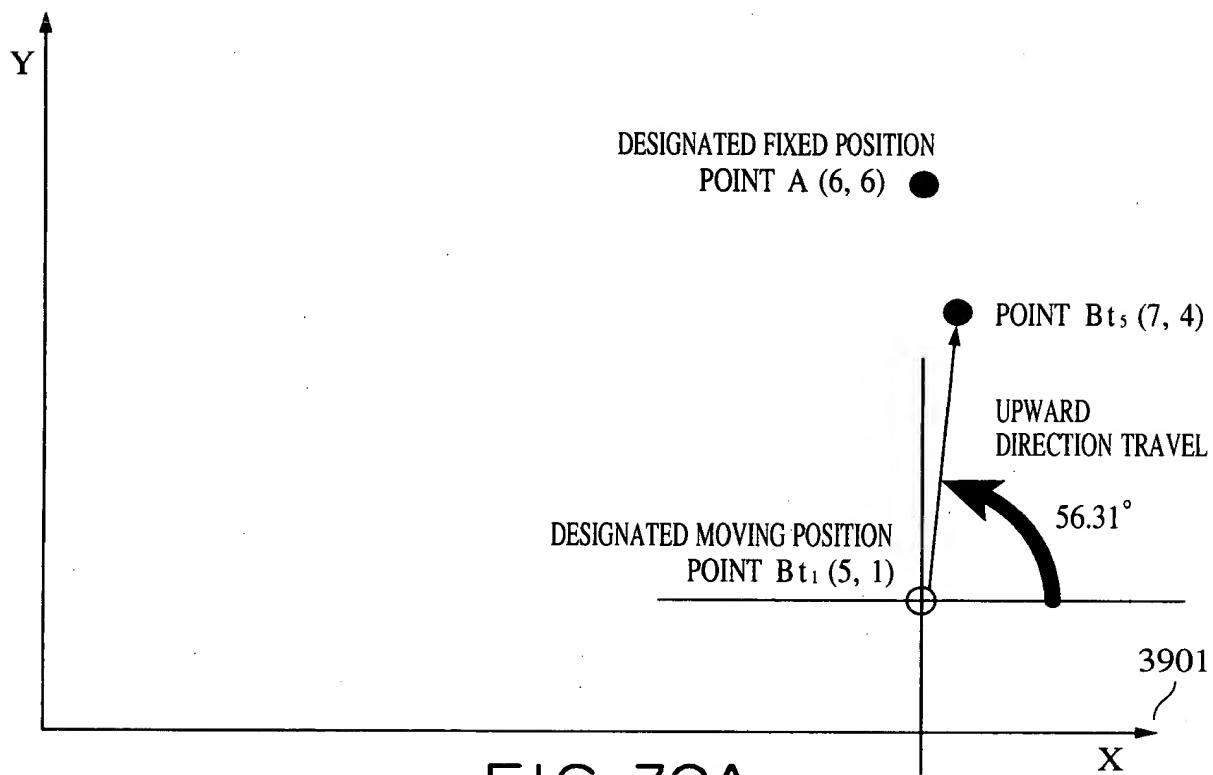


FIG. 39A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _x	A _y
t ₁	6	6
t ₂	6	6
t ₃	6	6
t ₄	6	6
t ₅	6	6

DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	B _x	B _y
t ₁	5.0	1.0
t ₂	5.6	1.8
t ₃	6.0	2.3
t ₄	6.6	3.5
t ₅	7.0	4.0

FIG. 39B

FIG. 39C

DESIGNATED POSITION TRAVEL DATA

	TRAVEL OF POINT A	TRAVEL OF POINT B	DIRECTION OF TRAVEL
t ₁	0.000	0.000	0.00
t ₂	0.000	1.000	53.13
t ₃	0.000	1.640	52.43
t ₄	0.000	2.968	57.38
t ₅	0.000	3.606	56.31

3903

FIG. 39D

DOWNTWARD TRAVEL

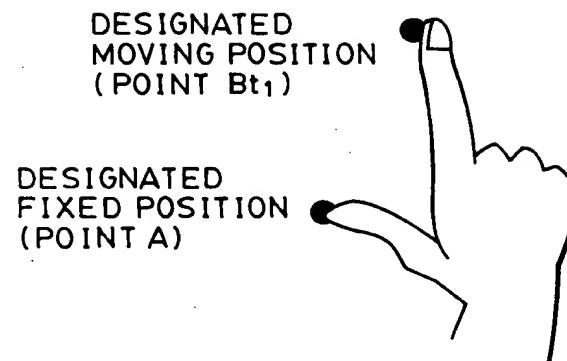


FIG. 40A

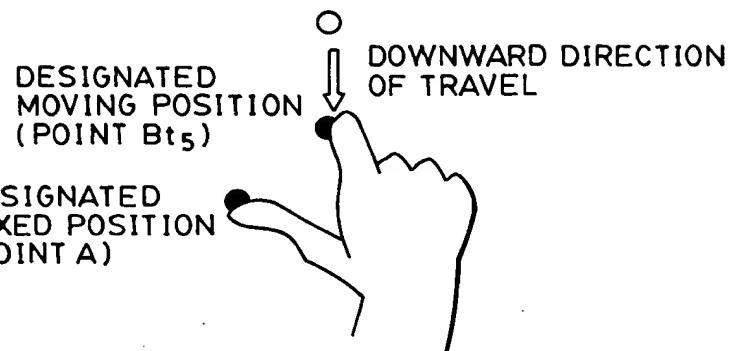


FIG. 40B

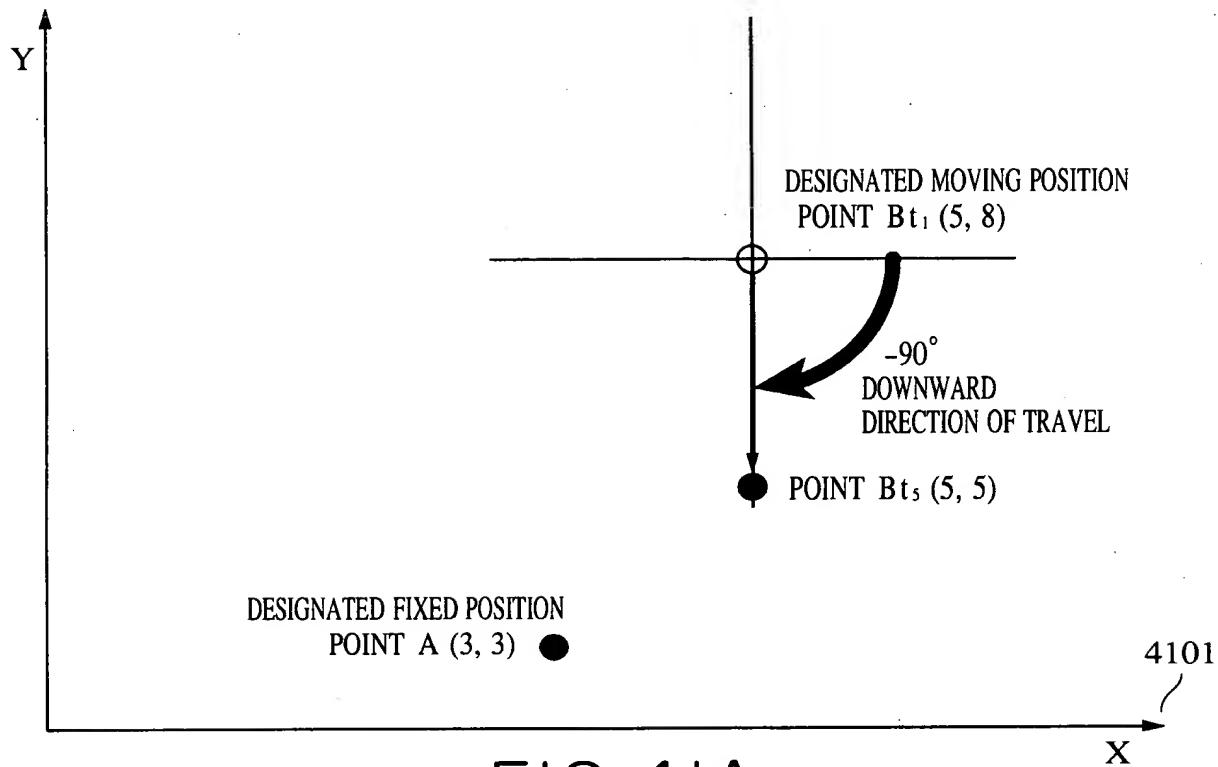


FIG. 4IA

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _x	A _y
t ₁	3	3
t ₂	3	3
t ₃	3	3
t ₄	3	3
t ₅	3	3

FIG. 4IB

DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	B _x	B _y
t ₁	5.0	8.0
t ₂	5.0	7.2
t ₃	5.0	6.5
t ₄	5.0	5.6
t ₅	5.0	5.0

FIG. 4IC

DESIGNATED POSITION TRAVEL DATA

	TRAVEL OF POINT A	TRAVEL OF POINT B	DIRECTION OF TRAVEL
t ₁	0.000	0.000	0.00
t ₂	0.000	0.800	-90.00
t ₃	0.000	1.500	-90.00
t ₄	0.000	2.400	-90.00
t ₅	0.000	3.000	-90.00

4103

FIG. 4ID

RIGHTWARD TRAVEL

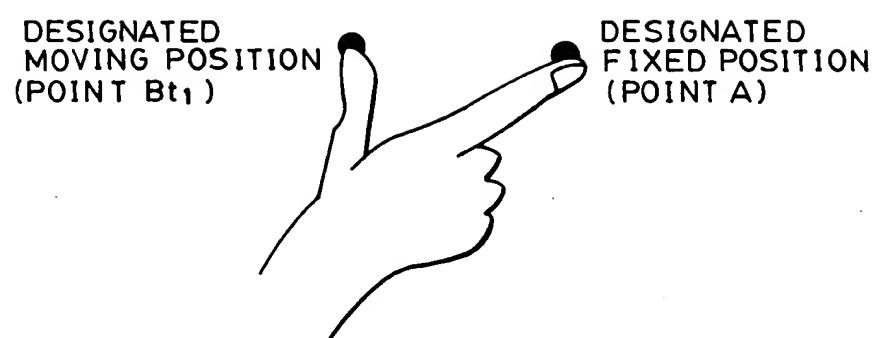


FIG. 42A



DESIGNATED
MOVING POSITION
(POINT B_{t5}) DESIGNATED
FIXED POSITION
(POINT A)

○ →
RIGHTWARD
DIRECTION
OF TRAVEL



FIG. 42B

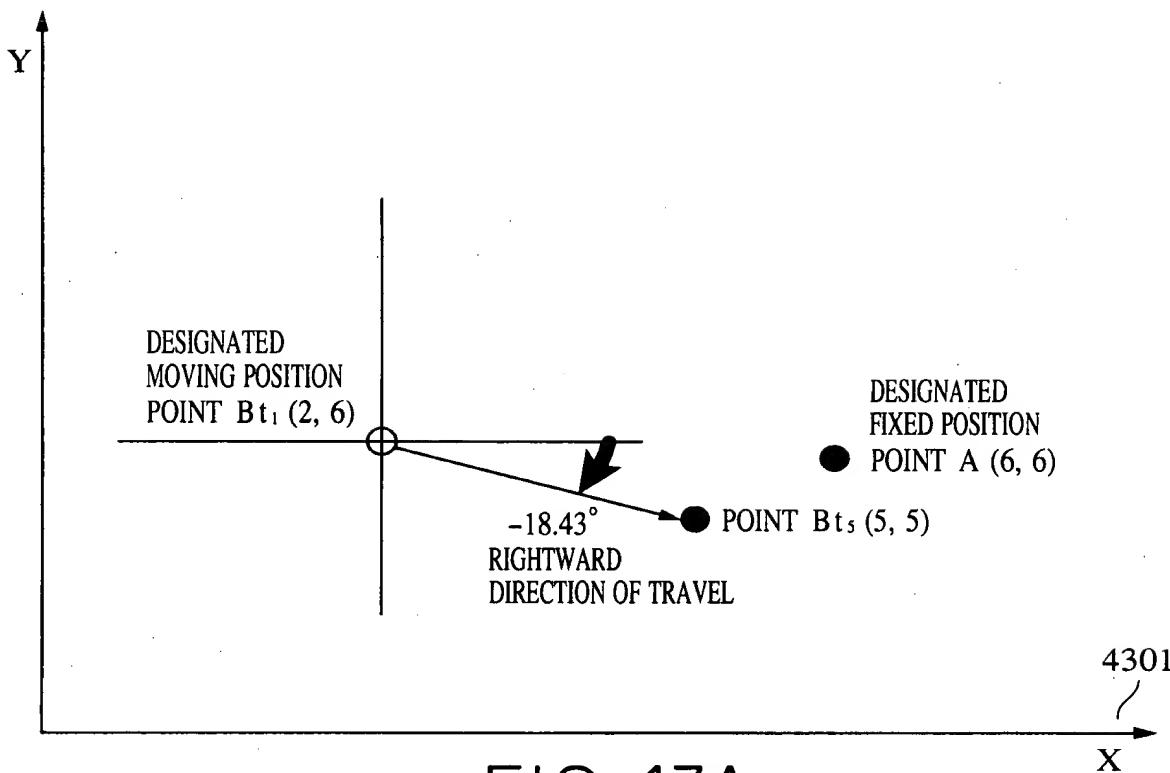


FIG. 43A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A_x	A_y
t_1	6	6
t_2	6	6
t_3	6	6
t_4	6	6
t_5	6	6

FIG. 43B

DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	B_x	B_y
t_1	2.0	6.0
t_2	2.8	5.7
t_3	3.5	5.6
t_4	4.2	5.2
t_5	5.0	5.0

FIG. 43C

DESIGNATED POSITION TRAVEL DATA

	TRAVEL OF POINT A	TRAVEL OF POINT B	DIRECTION OF TRAVEL
t_1	0.000	0.000	0.00
t_2	0.000	4.892	-40.86
t_3	0.000	4.383	-34.78
t_4	0.000	3.672	-29.36
t_5	0.000	3.162	-18.43

4303

FIG. 43D

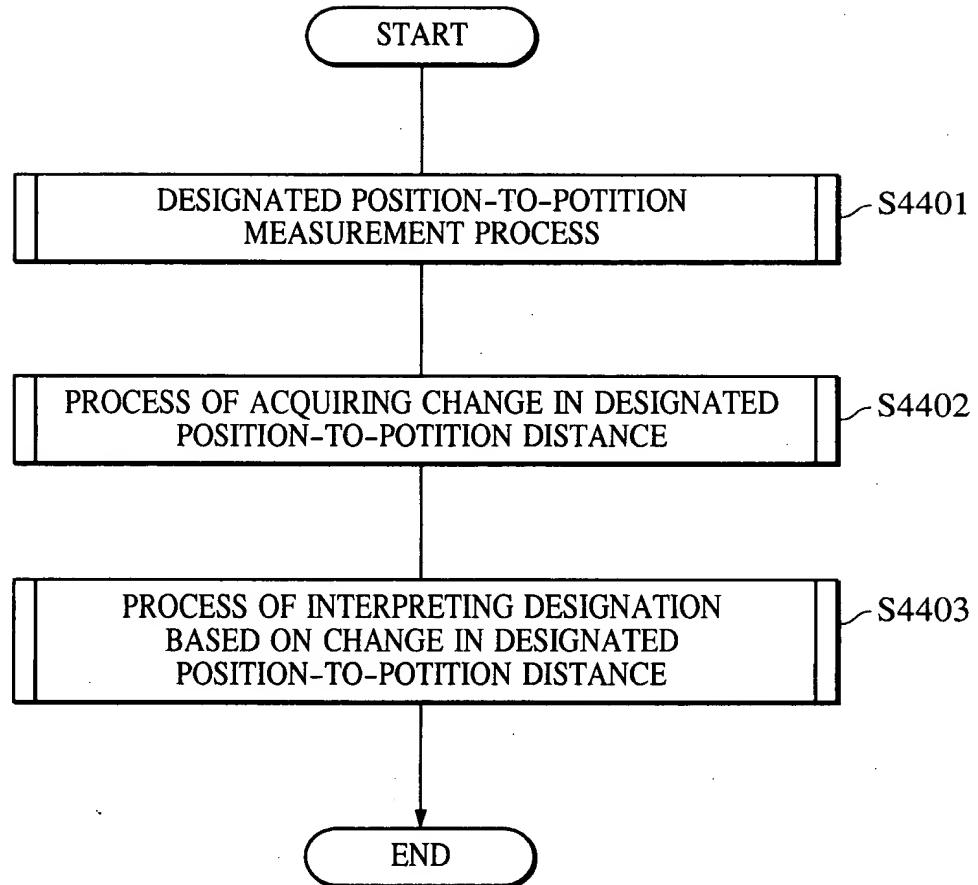


FIG. 44

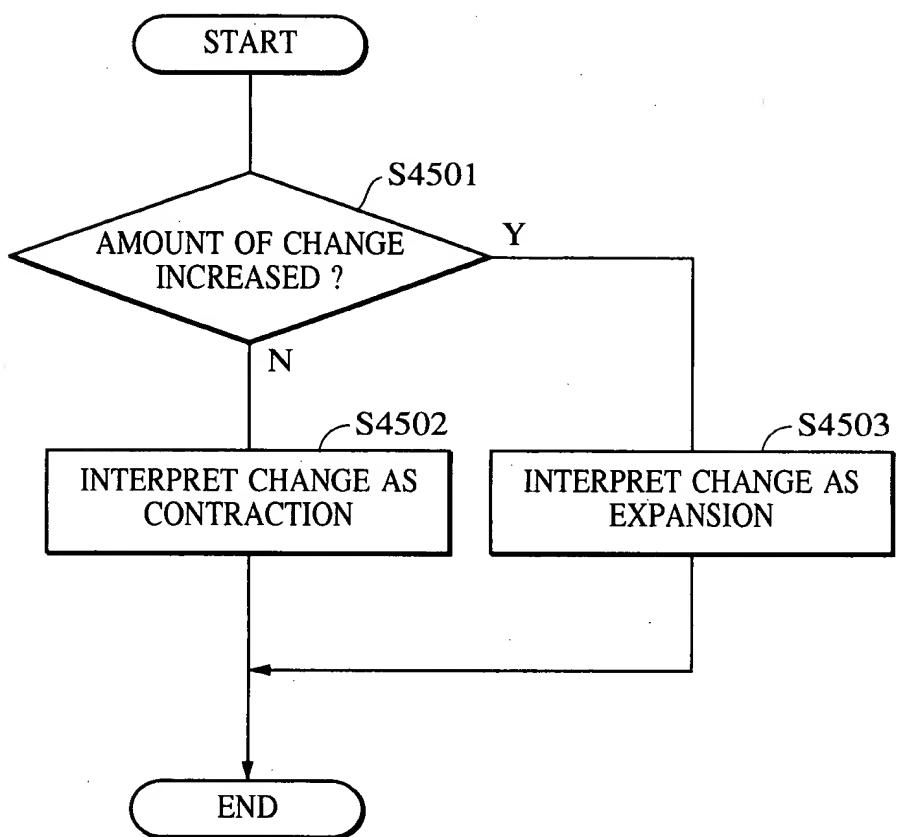


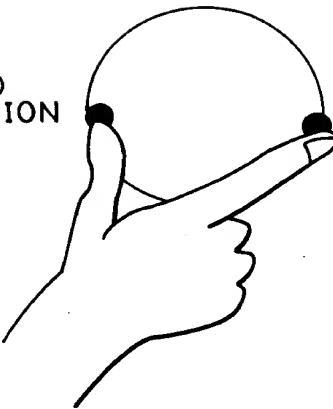
FIG. 45

CONTRACTION OPERATION

DESIGNATED
FIXED POSITION
(POINT A)

DESIGNATED
MOVING POSITION
(POINT B_{t1})

FIG. 46A



CONTRACTION

DESIGNATED
FIXED POSITION
(POINT A)

DESIGNATED
MOVING POSITION
(POINT B_{t5})

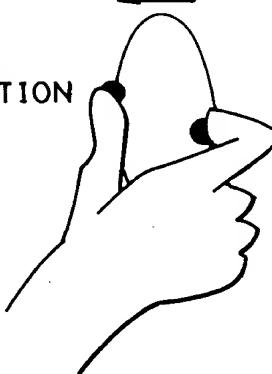


FIG. 46B

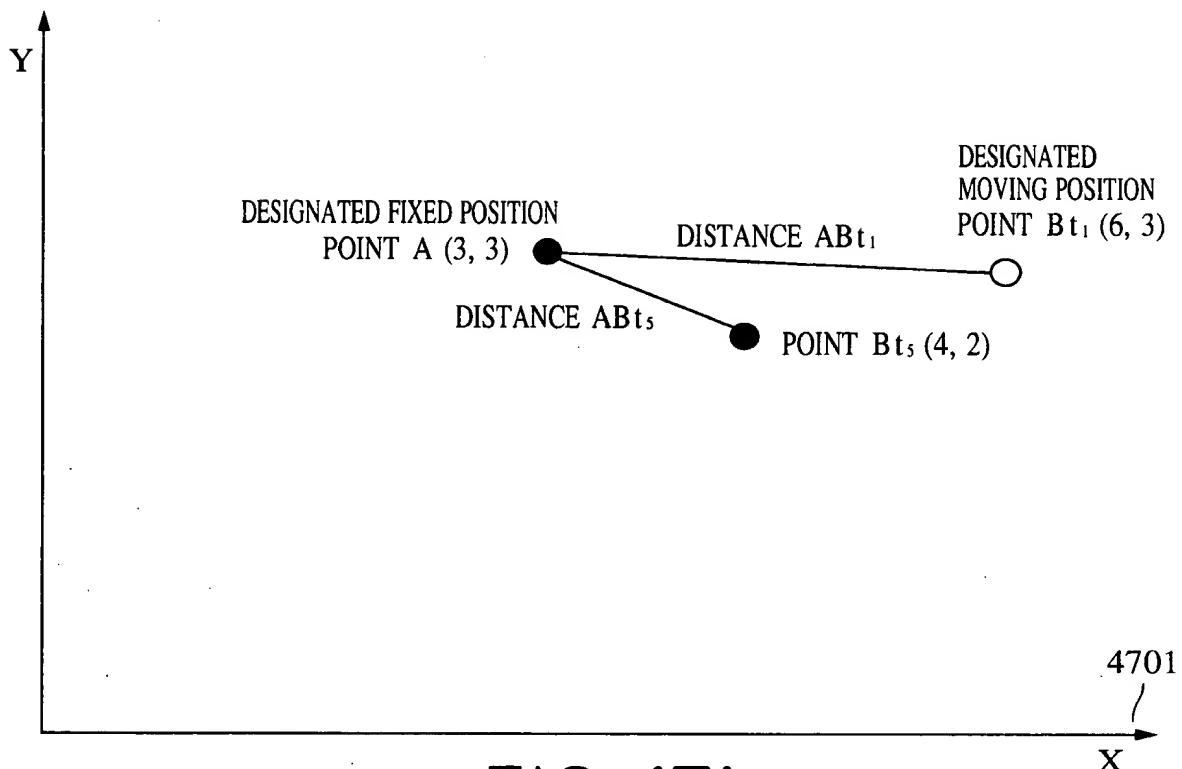


FIG. 47A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _X	A _Y
t ₁	3	3
t ₂	3	3
t ₃	3	3
t ₄	3	3
t ₅	3	3

DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	B _X	B _Y
t ₁	6.0	3.0
t ₂	5.3	2.3
t ₃	4.7	1.7
t ₄	4.3	1.2
t ₅	4.0	2.0

FIG. 47B

FIG. 47C

DATA OF CHANGE IN DESIGNATED POSITION-TO-POSITION DISTANCE

4703

	DISTANCE BETWEEN A AND B	MAGNIFICATION (DISTANCE t _n / DISTANCE t ₁)	DISTANCE t _n / DISTANCE t ₁
t ₁	3.000	100%	0.000
t ₂	2.436	81%	-0.564
t ₃	2.114	70%	-0.886
t ₄	2.240	75%	-0.760
t ₅	1.414	47%	-1.586

FIG. 47D

EXPANSION OPERATION

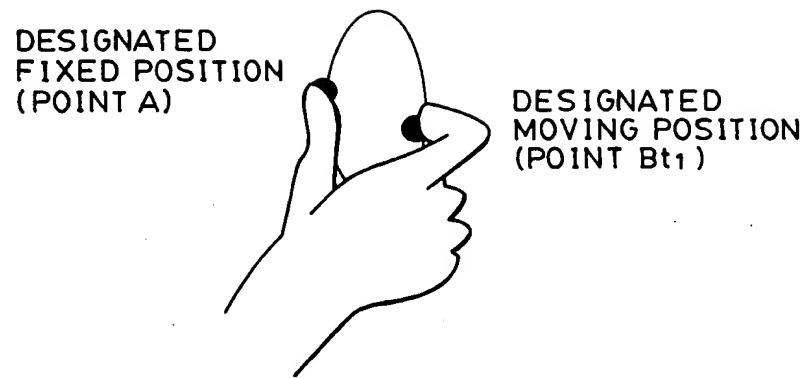


FIG. 48A

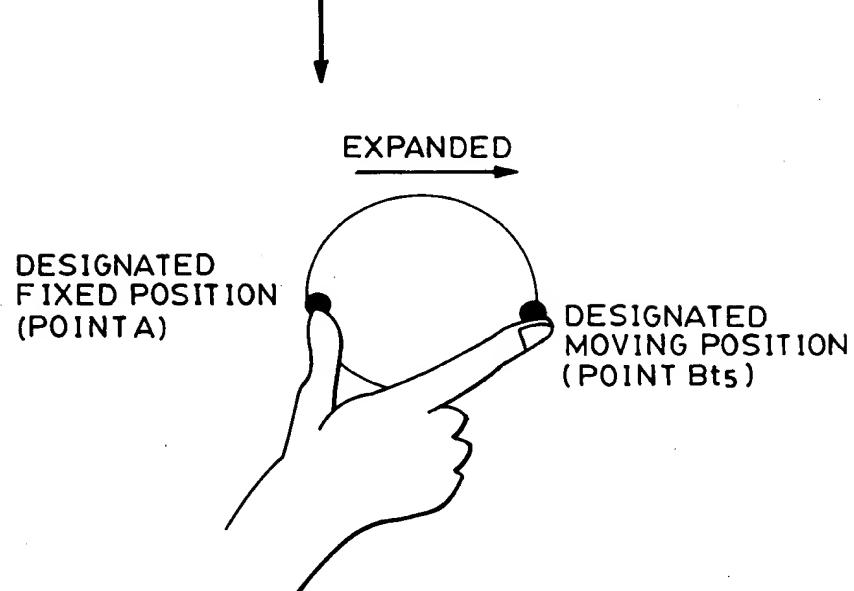


FIG. 48B

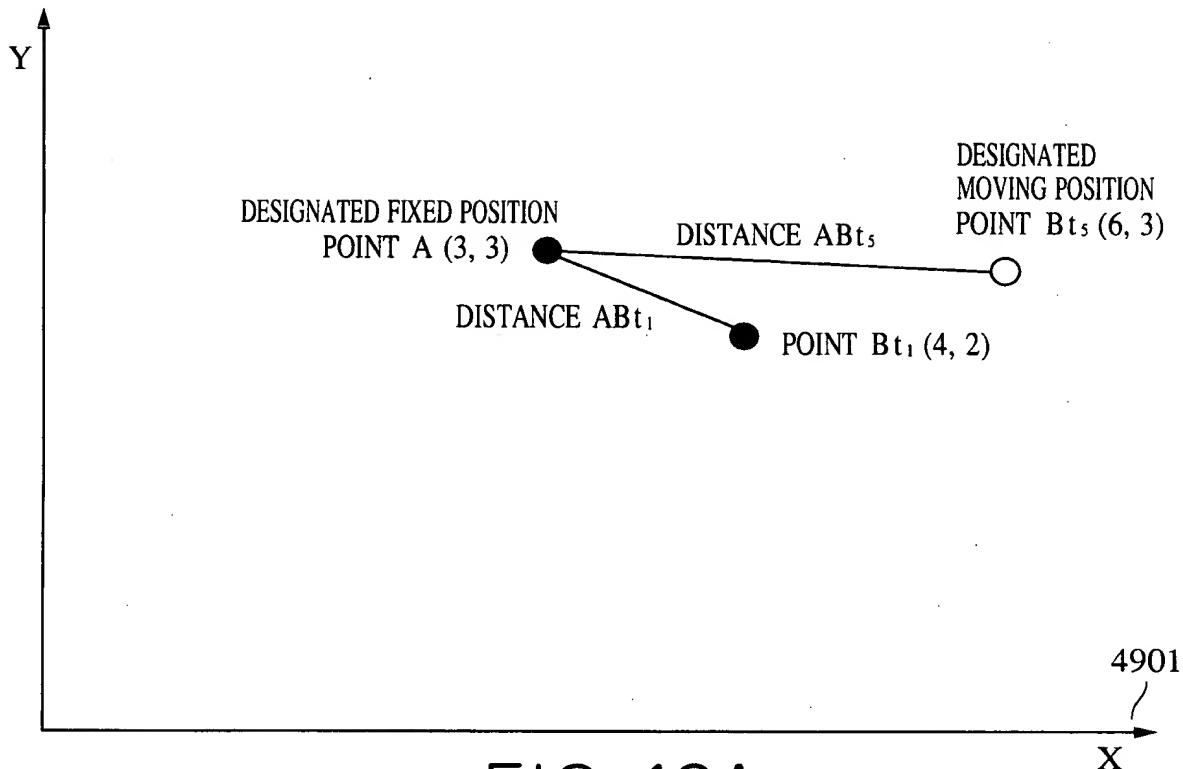


FIG. 49A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _x	A _y
t ₁	3	3
t ₂	3	3
t ₃	3	3
t ₄	3	3
t ₅	3	3

FIG. 49B

DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	B _x	B _y
t ₁	4.0	2.0
t ₂	4.5	2.2
t ₃	5.2	2.5
t ₄	5.8	2.8
t ₅	6.0	3.0

4902

FIG. 49C

DATA OF CHANGE IN DESIGNATED POSITION-TO-POSITION DISTANCE

	DISTANCE BETWEEN A AND B	MAGNIFICATION (DISTANCE t _n / DISTANCE t ₁)
t ₁	1.414	100%
t ₂	1.700	120%
t ₃	2.256	160%
t ₄	2.807	198%
t ₅	3.000	212%

4903

FIG. 49D

CONTRACTION OPERATION

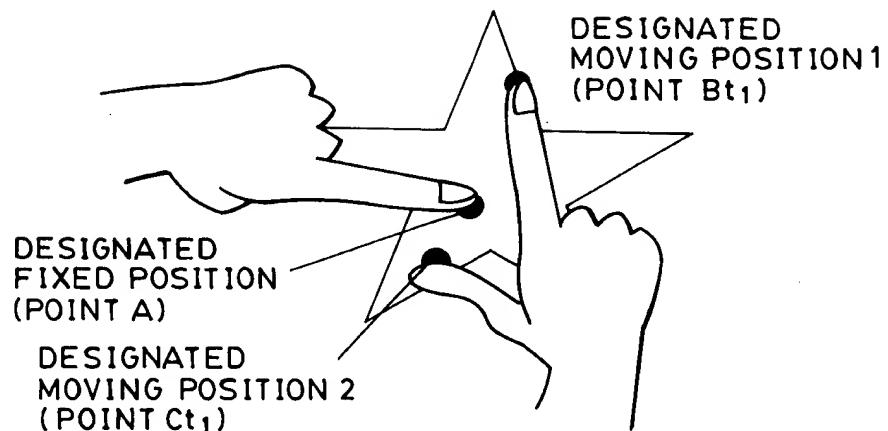


FIG. 50A

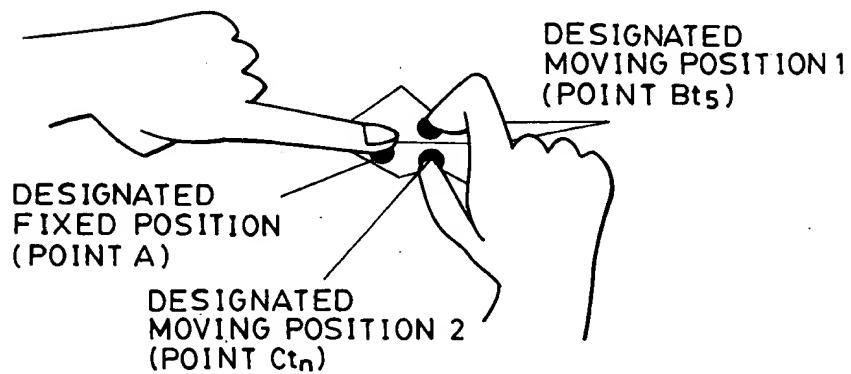


FIG. 50B

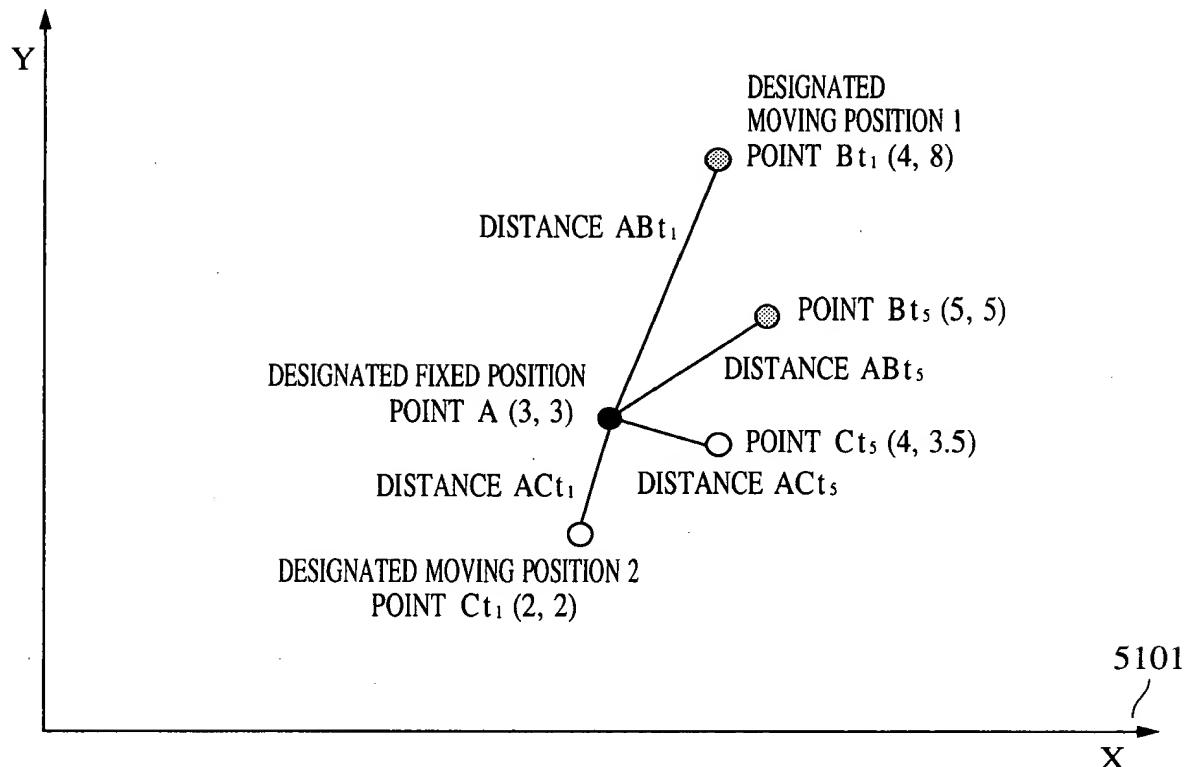


FIG. 51A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _x	A _y	B _x	B _y	C _x	C _y
t ₁	3	3	4.0	8.0	2.0	2.0
t ₂	3	3	4.2	7.2	2.8	2.3
t ₃	3	3	4.4	6.3	3.4	2.8
t ₄	3	3	4.7	5.8	3.8	3.3
t ₅	3	3	5.0	5.0	4.0	3.5

DESIGNATED MOVING POSITION 1
POSITION DATA OF POINT B

	B _x	B _y
t ₁	4.0	8.0
t ₂	4.2	7.2
t ₃	4.4	6.3
t ₄	4.7	5.8
t ₅	5.0	5.0

DESIGNATED MOVING POSITION 2
POSITION DATA OF POINT C

	C _x	C _y
t ₁	2.0	2.0
t ₂	2.8	2.3
t ₃	3.4	2.8
t ₄	3.8	3.3
t ₅	4.0	3.5

FIG. 5|C FIG. 5|D

DATA 1 OF CHANGE IN DESIGNATED
POSITION-TO-POSITION DISTANCE

DISTANCE BETWEEN A AND B	MAGNIFICATION (DISTANCE t _n /DISTANCE t ₁)
t ₁ 5.099	100%
t ₂ 4.368	86%
t ₃ 3.585	70%
t ₄ 3.276	64%
t ₅ 2.828	55%

DATA 2 OF CHANGE IN DESIGNATED
POSITION-TO-POSITION DISTANCE

DISTANCE BETWEEN A AND B	MAGNIFICATION (DISTANCE t _n /DISTANCE t ₁)
t ₁	1.414
t ₂	0.728
t ₃	0.447
t ₄	0.854
t ₅	1.118

FIG. 5|E

FIG. 5|F

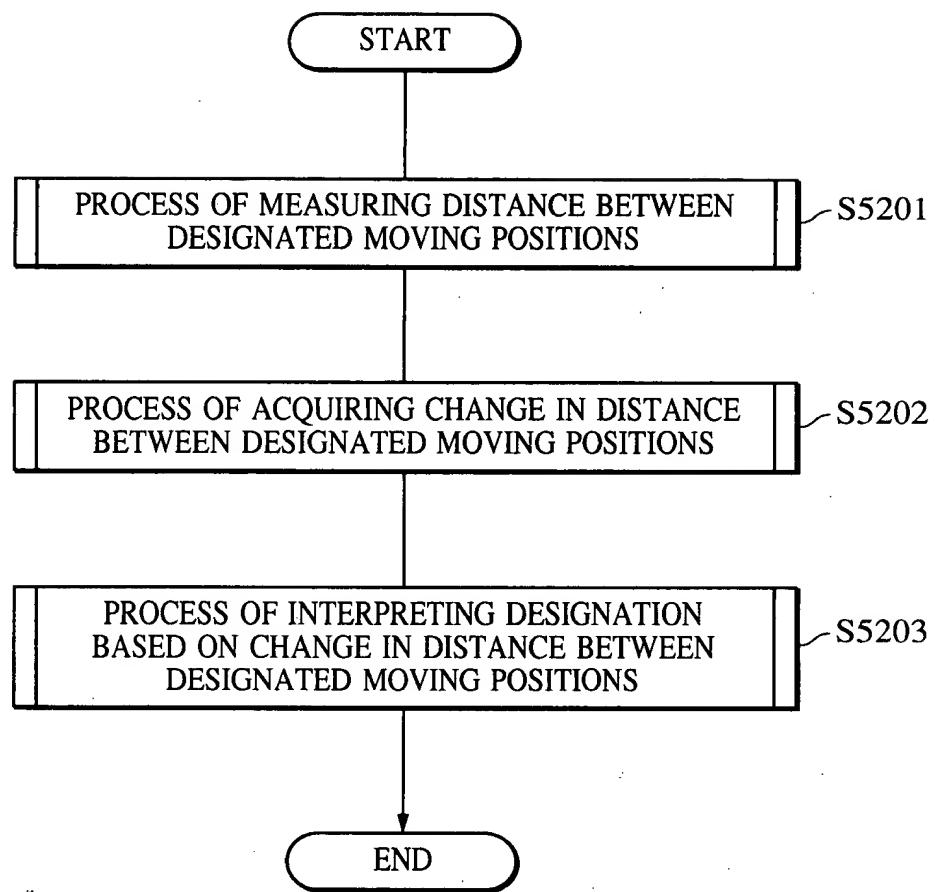


FIG. 52

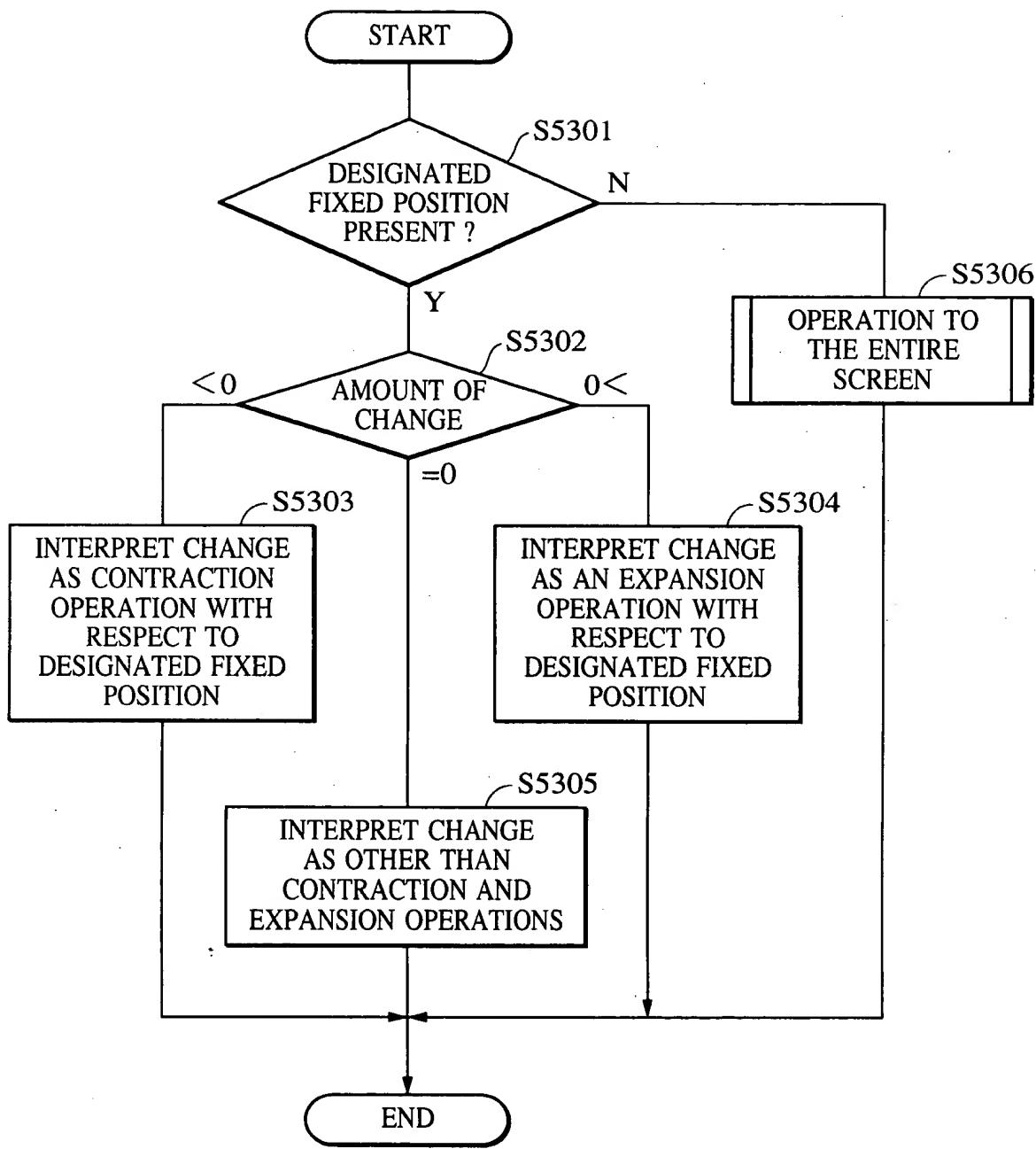


FIG. 53

CONTRACTION OPERATION

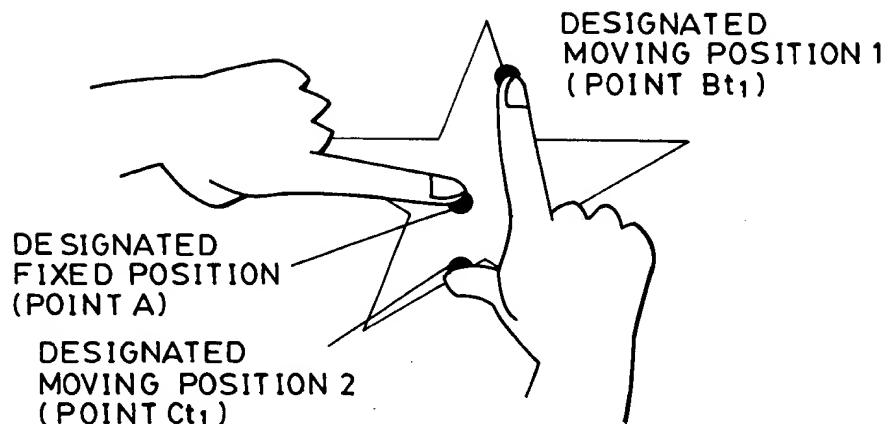


FIG. 54A

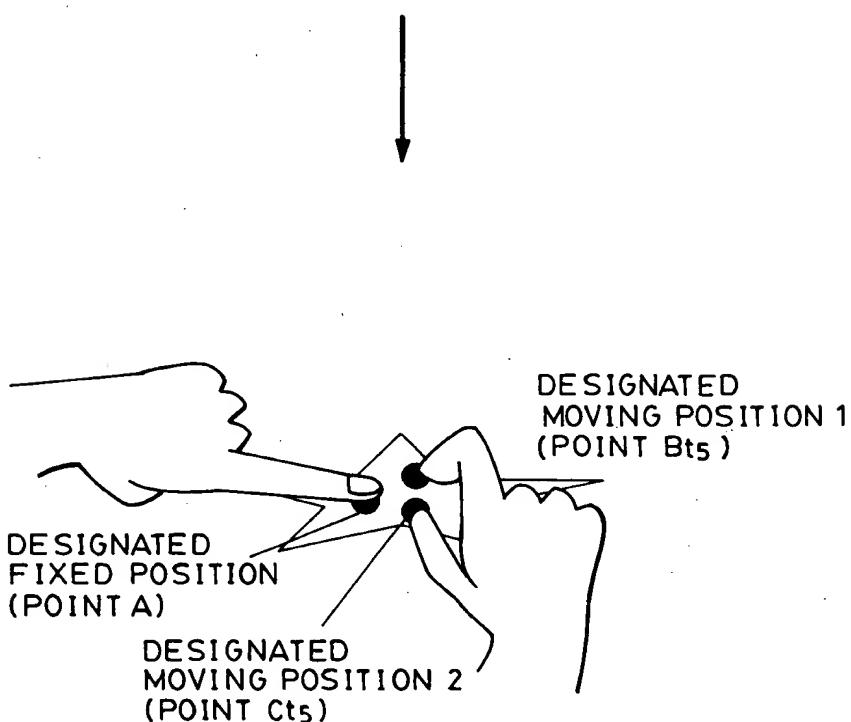


FIG. 54B

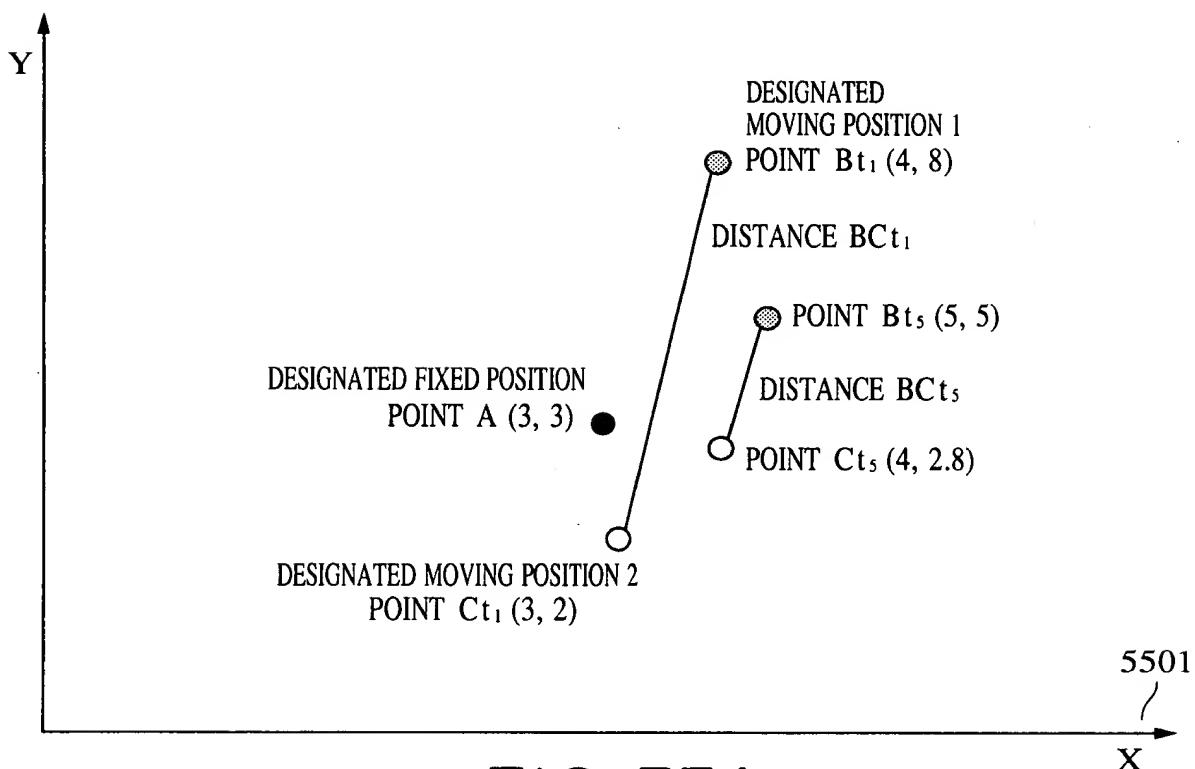


FIG. 55A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A_x	A_y
t_1	3	3
t_2	3	3
t_3	3	3
t_4	3	3
t_5	3	3

DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	B_x	B_y
t_1	4.0	8.0
t_2	4.2	7.2
t_3	4.4	6.3
t_4	4.7	5.8
t_5	5.0	5.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT C

	C_x	C_y
t_1	3.0	2.0
t_2	3.2	2.2
t_3	3.4	2.4
t_4	3.8	2.6
t_5	4.0	2.8

FIG. 55B

FIG. 55C

FIG. 55D

DATA OF CHANGE IN DESIGNATED
POSITION-TO-POSITION DISTANCE

	DISTANCE BETWEEN B AND C	MAGNIFICATION (DISTANCE t_n / DISTANCE t_1)
t_1	6.083	100%
t_2	5.099	84%
t_3	4.026	66%
t_4	3.324	55%
t_5	2.417	40%

5503

FIG. 55E

CONTRACTION OPERATION

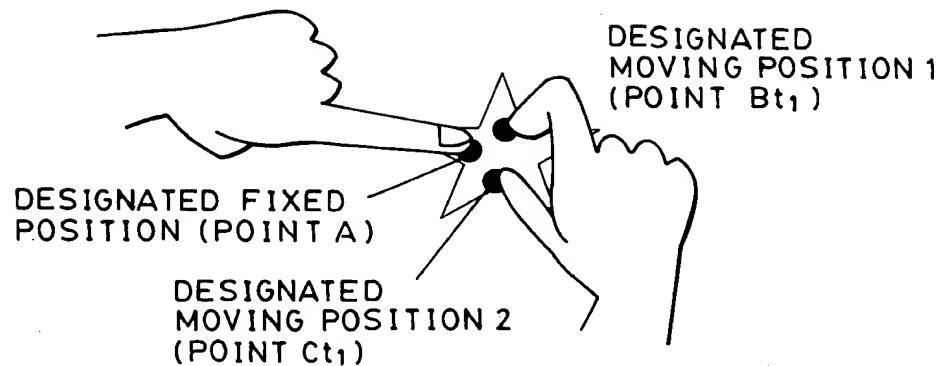


FIG. 56A

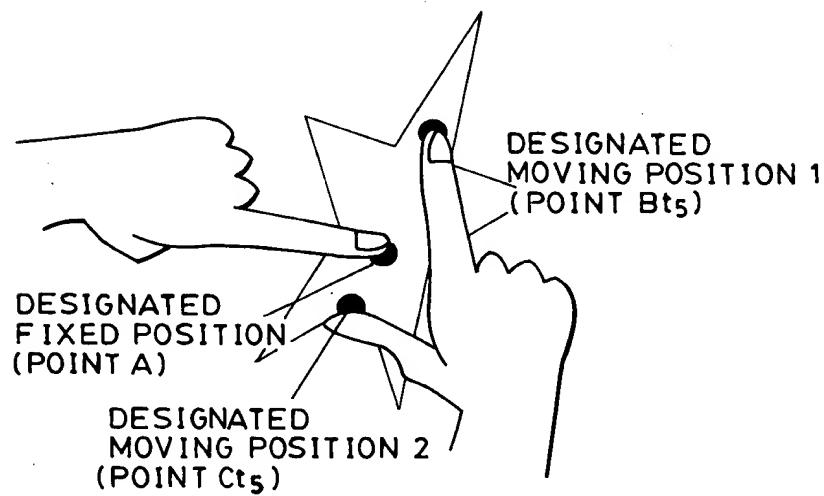


FIG. 56B

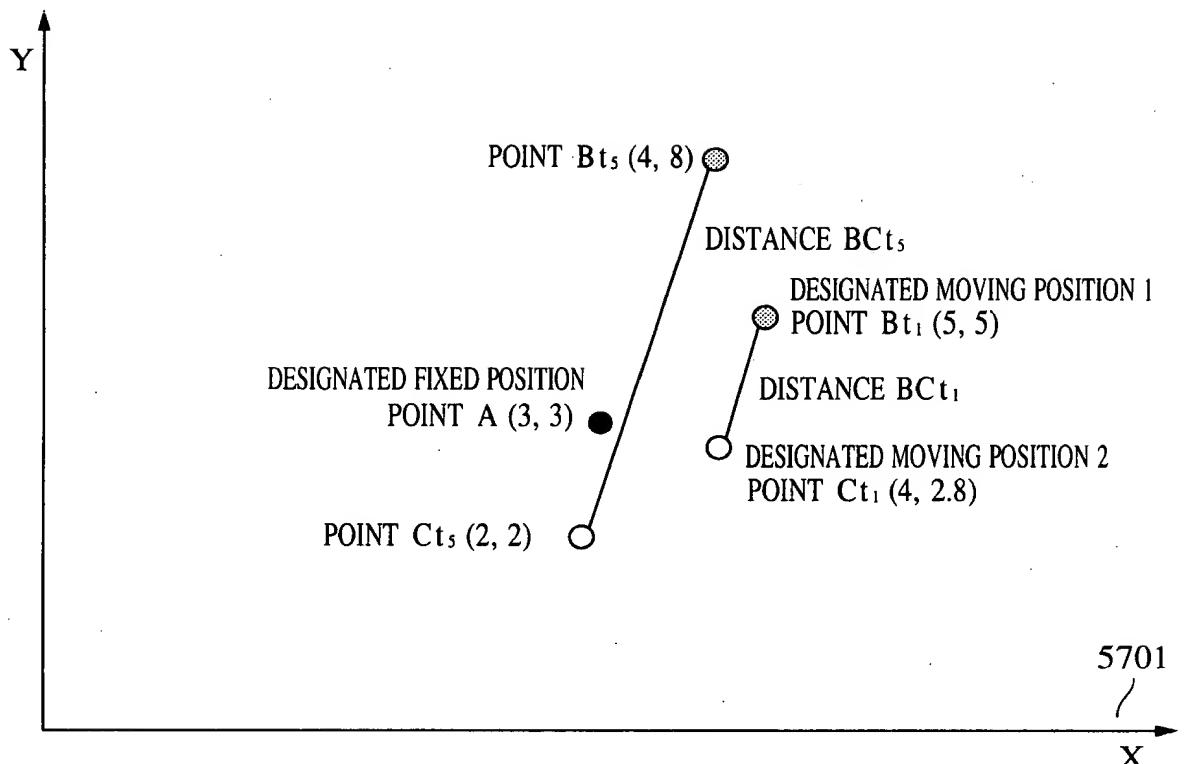


FIG. 57A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _x	A _y
t ₁	3	3
t ₂	3	3
t ₃	3	3
t ₄	3	3
t ₅	3	3

DESIGNATED MOVING POSITION 1
POSITION DATA OF POINT B

	B _x	B _y
t ₁	5.0	5.0
t ₂	4.7	5.8
t ₃	4.4	6.3
t ₄	4.2	7.2
t ₅	4.0	8.0

DESIGNATED MOVING POSITION 2
POSITION DATA OF POINT C

	C _x	C _y
t ₁	4.0	2.8
t ₂	3.8	2.6
t ₃	3.4	2.4
t ₄	2.8	2.2
t ₅	2.0	2.0

FIG. 57B

FIG. 57C

FIG. 57D

DATA OF CHANGE IN DESIGNATED
POSITION-TO-POSITION DISTANCE

5703

	DISTANCE BETWEEN B AND C	MAGNIFICATION (DISTANCE t _n / DISTANCE t ₁)
t ₁	2.417	100%
t ₂	3.324	138%
t ₃	4.026	167%
t ₄	5.192	215%
t ₅	6.325	262%

FIG. 57E

DESIGNATING A PLURALITY OF MOVING POINTS

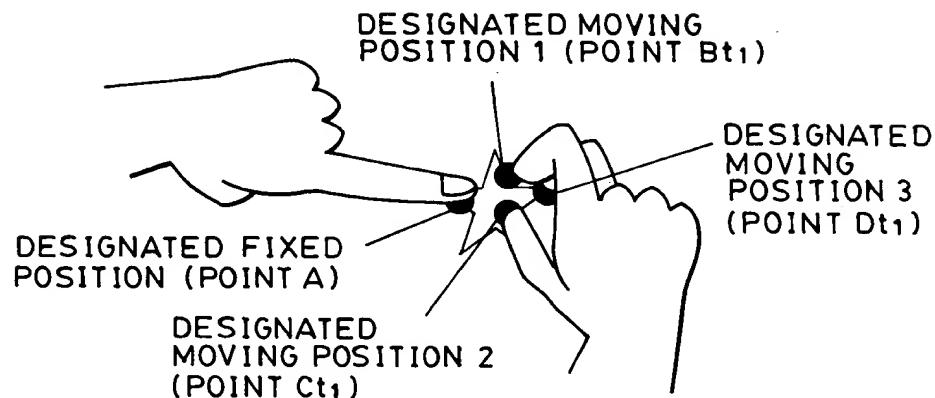


FIG. 58A

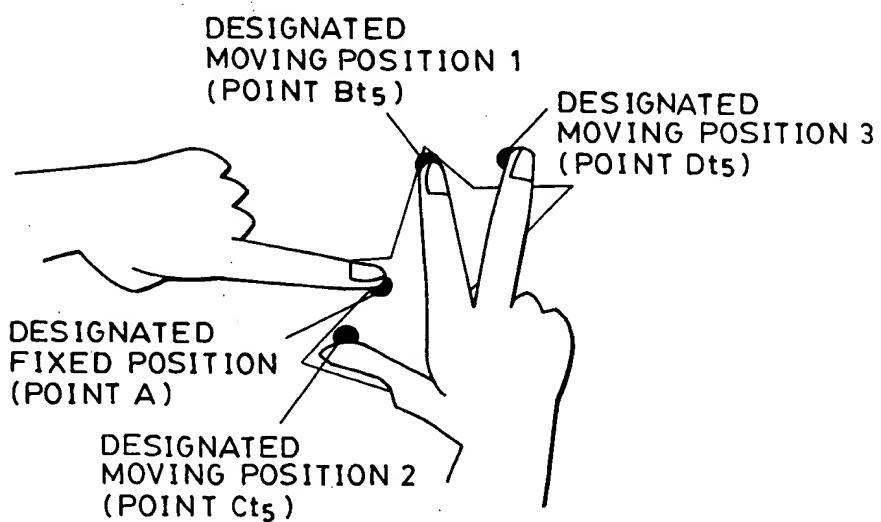


FIG. 58B

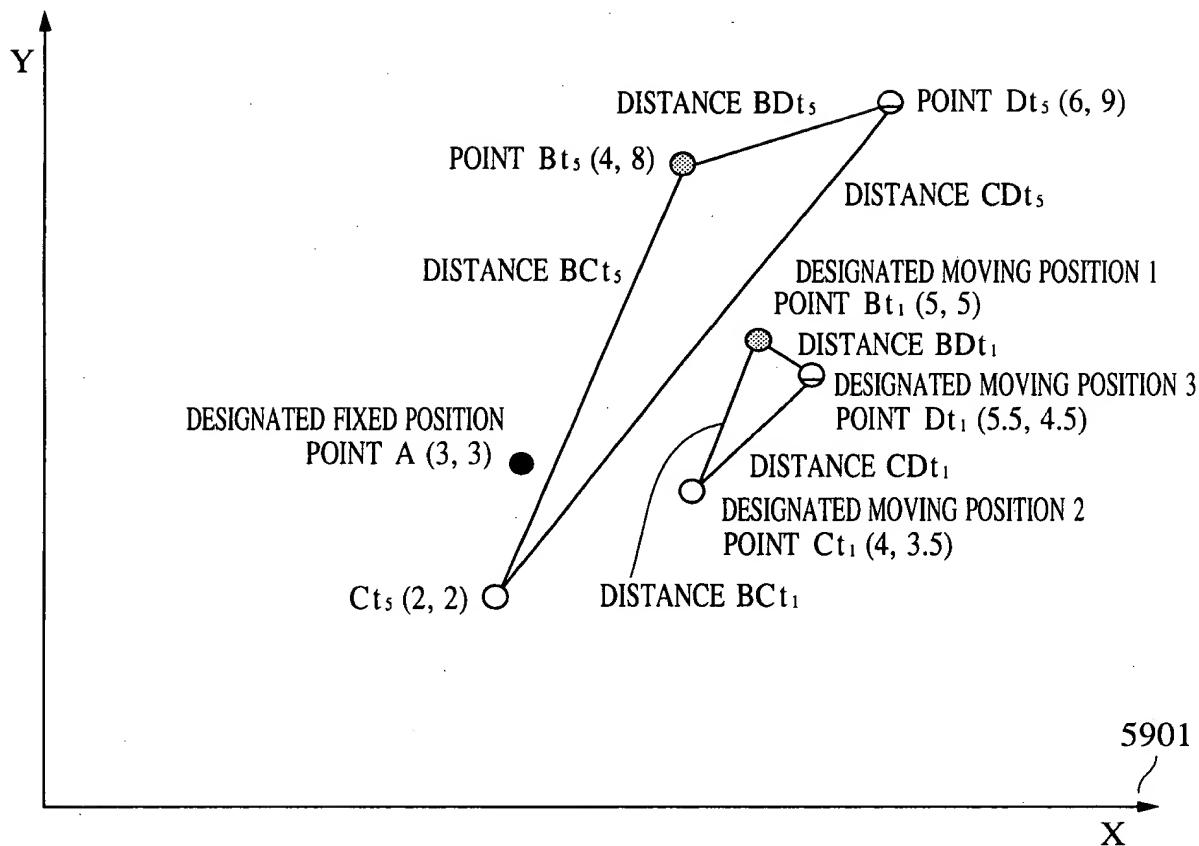


FIG. 59A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _x	A _y
t ₁	3	3
t ₂	3	3
t ₃	3	3
t ₄	3	3
t ₅	3	3

DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	B _x	B _y
t ₁	5.0	5.0
t ₂	4.7	5.8
t ₃	4.4	6.3
t ₄	4.2	7.2
t ₅	4.0	8.0

FIG. 59B

DESIGNATED MOVING POSITION
POSITION DATA OF POINT C

	C _x	C _y
t ₁	4.0	3.5
t ₂	3.8	3.3
t ₃	3.4	2.8
t ₄	2.8	2.3
t ₅	2.0	2.0

FIG. 59D

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DATA 2 OF CHANGE IN DESIGNATED
POSITION-TO-POSITION DISTANCE

	DISTANCE BETWEEN B AND D (DISTANCE t _n / DISTANCE t ₁)	MAGNIFICATION (DISTANCE t _n / DISTANCE t ₁)	MAGNIFICATION BETWEEN C AND D (DISTANCE t _n / DISTANCE t ₁)	MAGNIFICATION BETWEEN C AND D (DISTANCE t _n / DISTANCE t ₁)
t ₁	1.803	100%	t ₁	1.803
t ₂	2.657	147%	t ₂	3.245
t ₃	3.640	202%	t ₃	4.837
t ₄	5.096	283%	t ₄	6.488
t ₅	6.325	351%	t ₅	8.062

DATA 1 OF CHANGE IN DESIGNATED
POSITION-TO-POSITION DISTANCE

	DISTANCE BETWEEN B AND C (DISTANCE t _n / DISTANCE t ₁)	MAGNIFICATION (DISTANCE t _n / DISTANCE t ₁)	MAGNIFICATION BETWEEN C AND D (DISTANCE t _n / DISTANCE t ₁)	MAGNIFICATION BETWEEN C AND D (DISTANCE t _n / DISTANCE t ₁)
t ₁	1.803	100%	t ₁	1.803
t ₂	2.657	147%	t ₂	3.245
t ₃	3.640	202%	t ₃	4.837
t ₄	5.096	283%	t ₄	6.488
t ₅	6.325	351%	t ₅	8.062

FIG. 59F

FIG. 59G

FIG. 59H

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D_x	D_y

<tbl_r cells="3" ix="4" maxcspan="1" maxrspan="1"

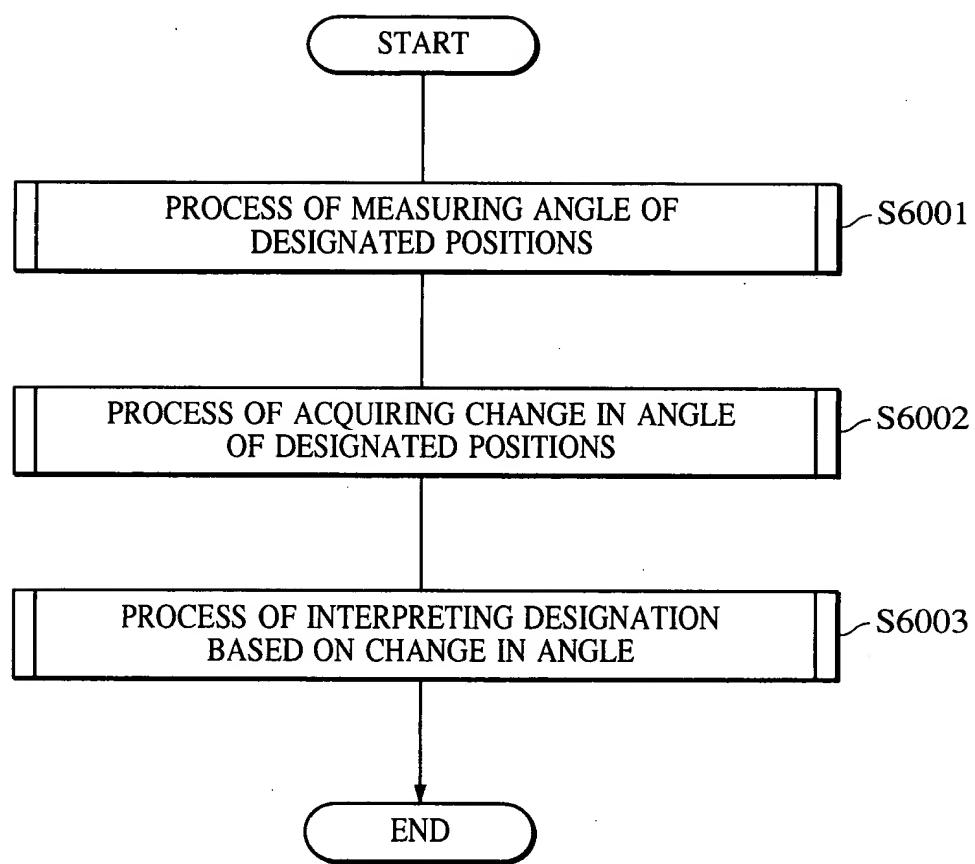


FIG. 60

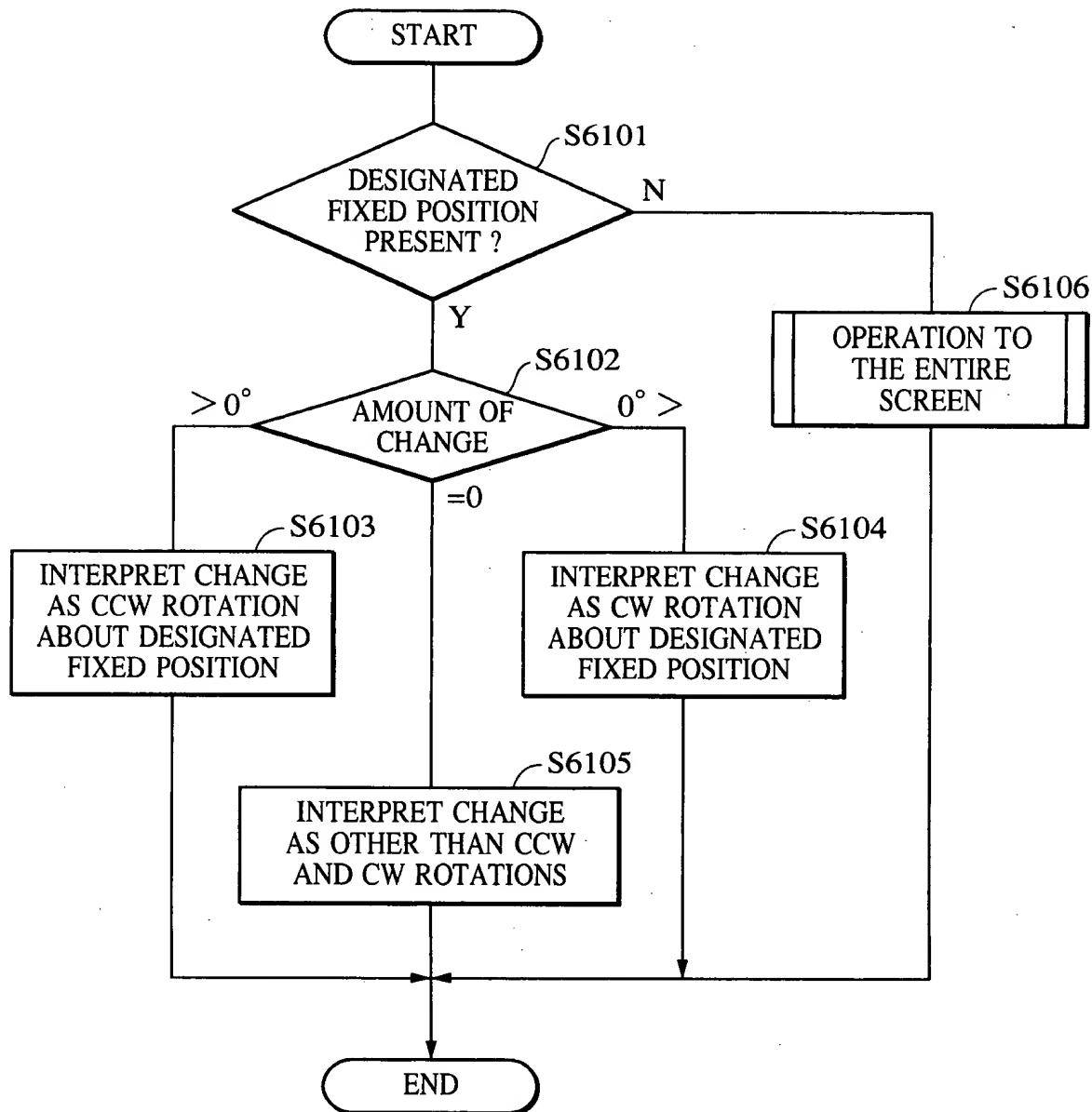
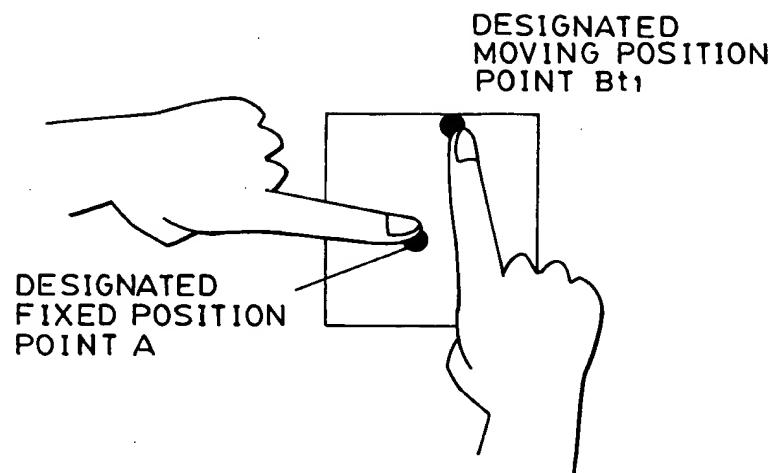


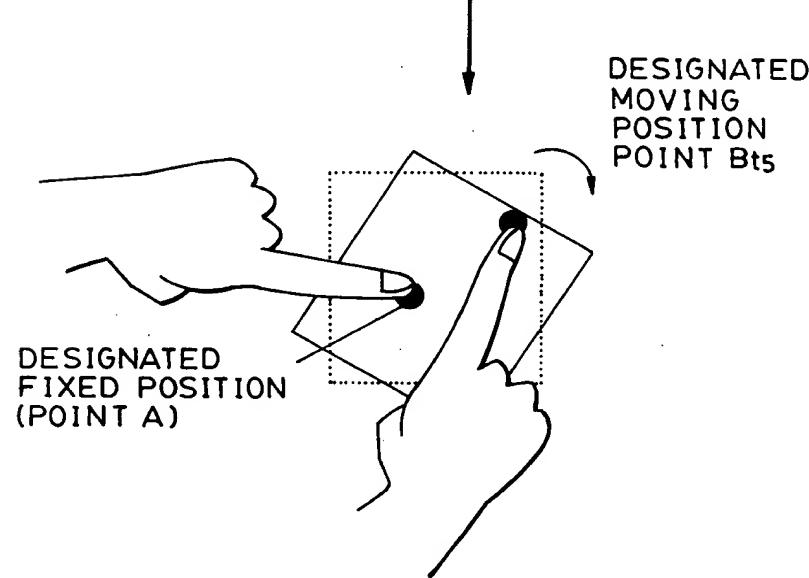
FIG. 61

CW ROTATION OPERATION



t_1

FIG. 62A



t_5

FIG. 62B

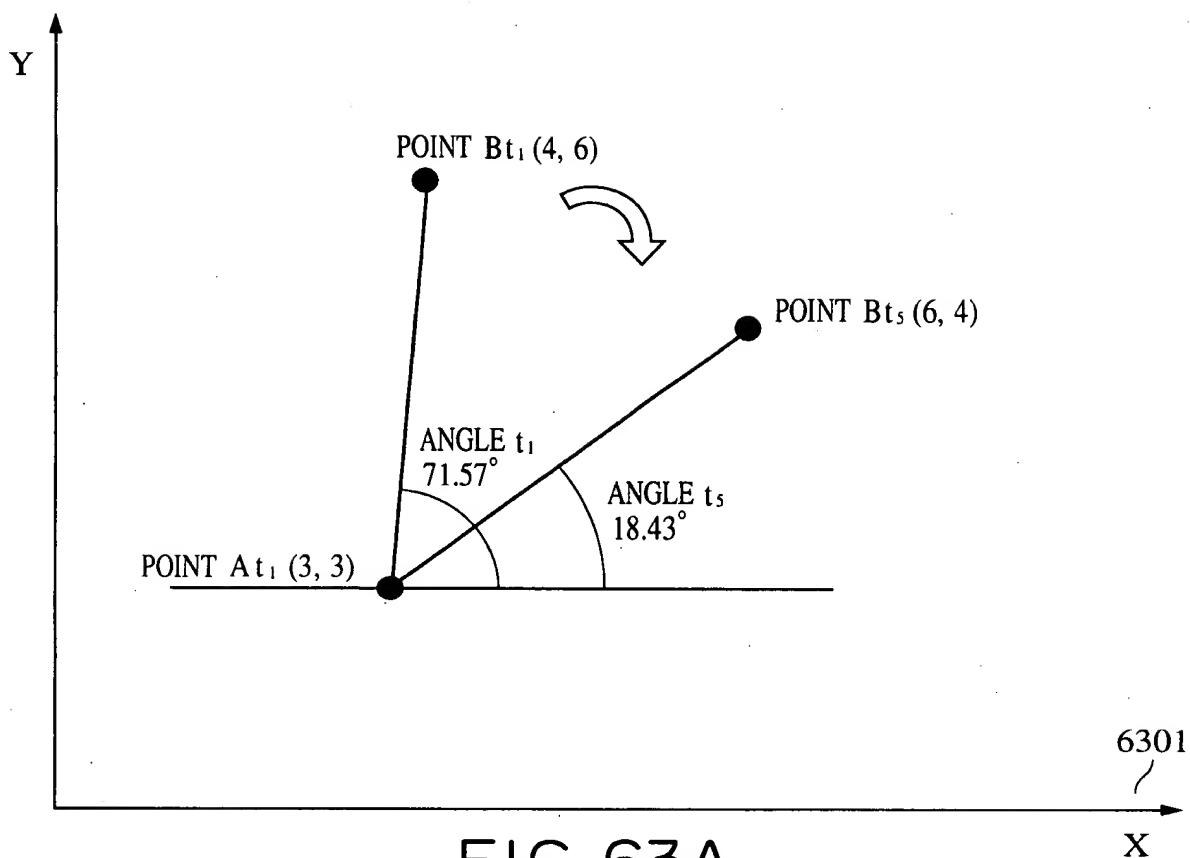


FIG. 63A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A_x	A_y
t_1	3	3
t_2	3	3
t_3	3	3
t_4	3	3
t_5	3	3

DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	B_x	B_y
t_1	4.0	6.0
t_2	4.7	5.7
t_3	5.2	5.3
t_4	5.7	4.6
t_5	6.0	4.0

FIG. 63B

6302A

6302B

FIG. 63C

DATA OF CHANGE IN ANGLE OF DESIGNATED POSITIONS

	ANGLE OF DESIGNATED POSITIONS	AMOUNT OF CHANGE
t_1	71.57	0.00
t_2	57.57	-14.00
t_3	45.91	-25.66
t_4	30.67	-40.90
t_5	18.43	-53.13

6303

FIG. 63D

CCW ROTATION OPERATION

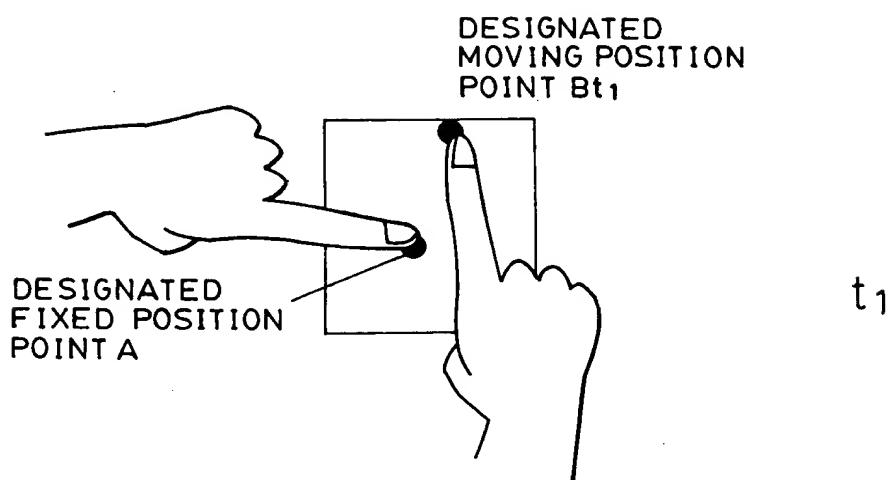


FIG. 64A

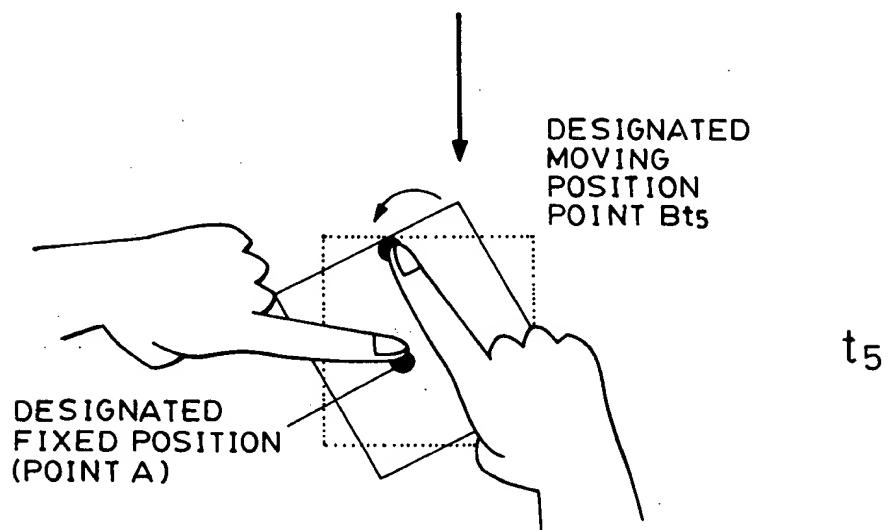


FIG. 64B

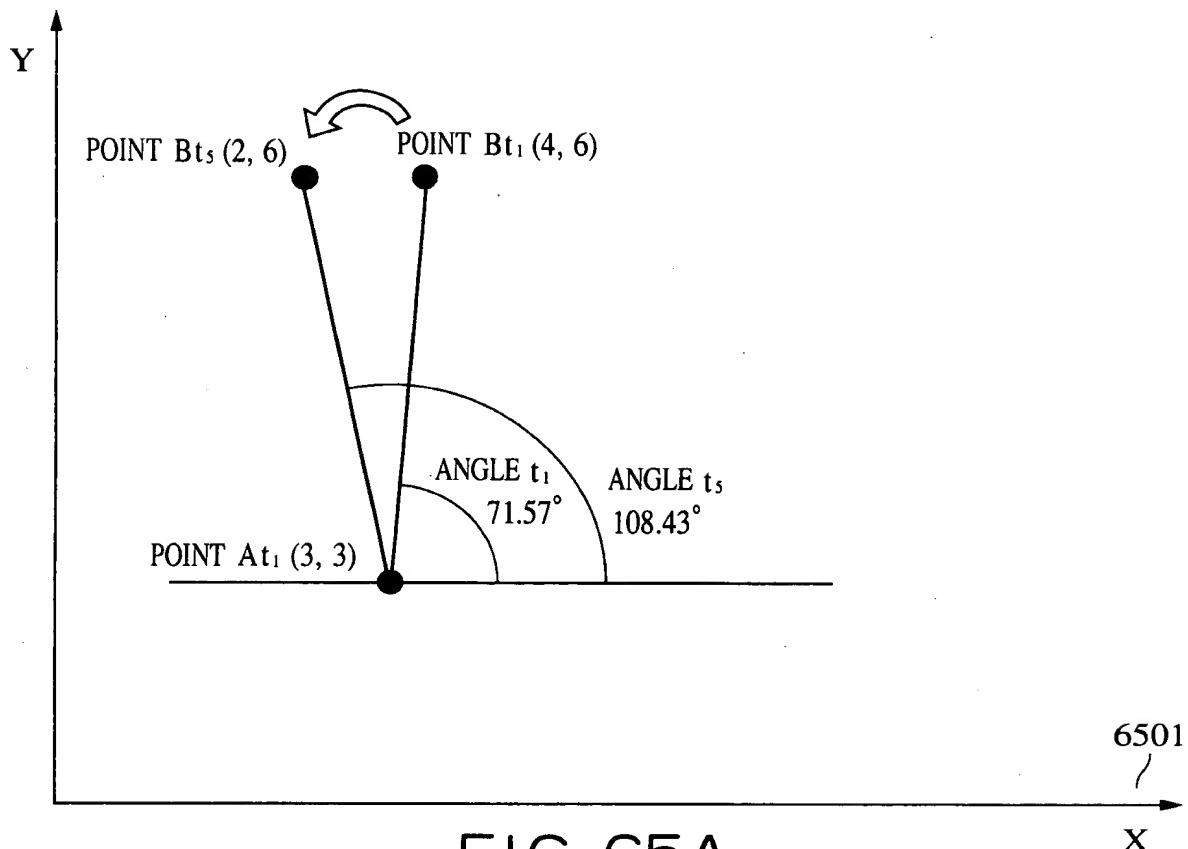


FIG. 65A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _x	A _y
t ₁	3	3
t ₂	3	3
t ₃	3	3
t ₄	3	3
t ₅	3	3

6502A

DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	B _x	B _y
t ₁	4.0	6.0
t ₂	3.5	6.1
t ₃	3.0	6.2
t ₄	2.5	6.1
t ₅	2.0	6.0

6502B

FIG. 65B

FIG. 65C

DATA OF CHANGE IN ANGLE OF DESIGNATED POSITIONS

	ANGLE OF DESIGNATED FIXED POSITIONS	AMOUNT OF CHANGE
t ₁	71.57	0.00
t ₂	80.90	9.34
t ₃	90.00	18.43
t ₄	99.10	27.53
t ₅	108.43	36.87

6503

FIG. 65D

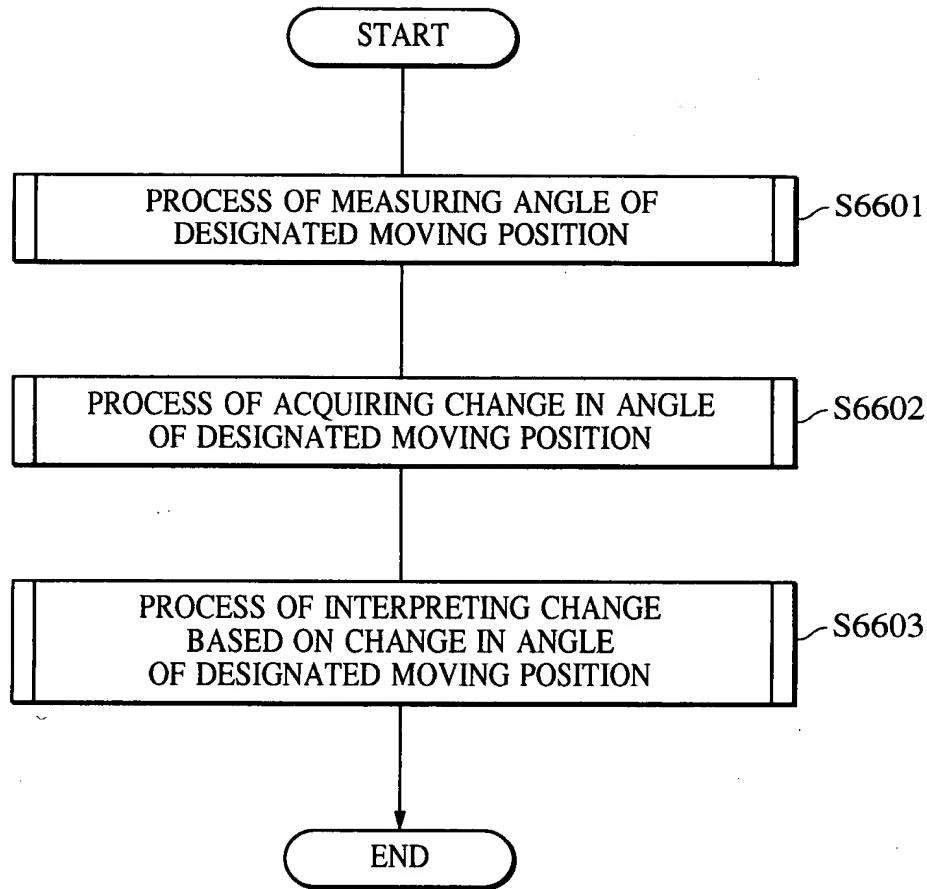


FIG. 66

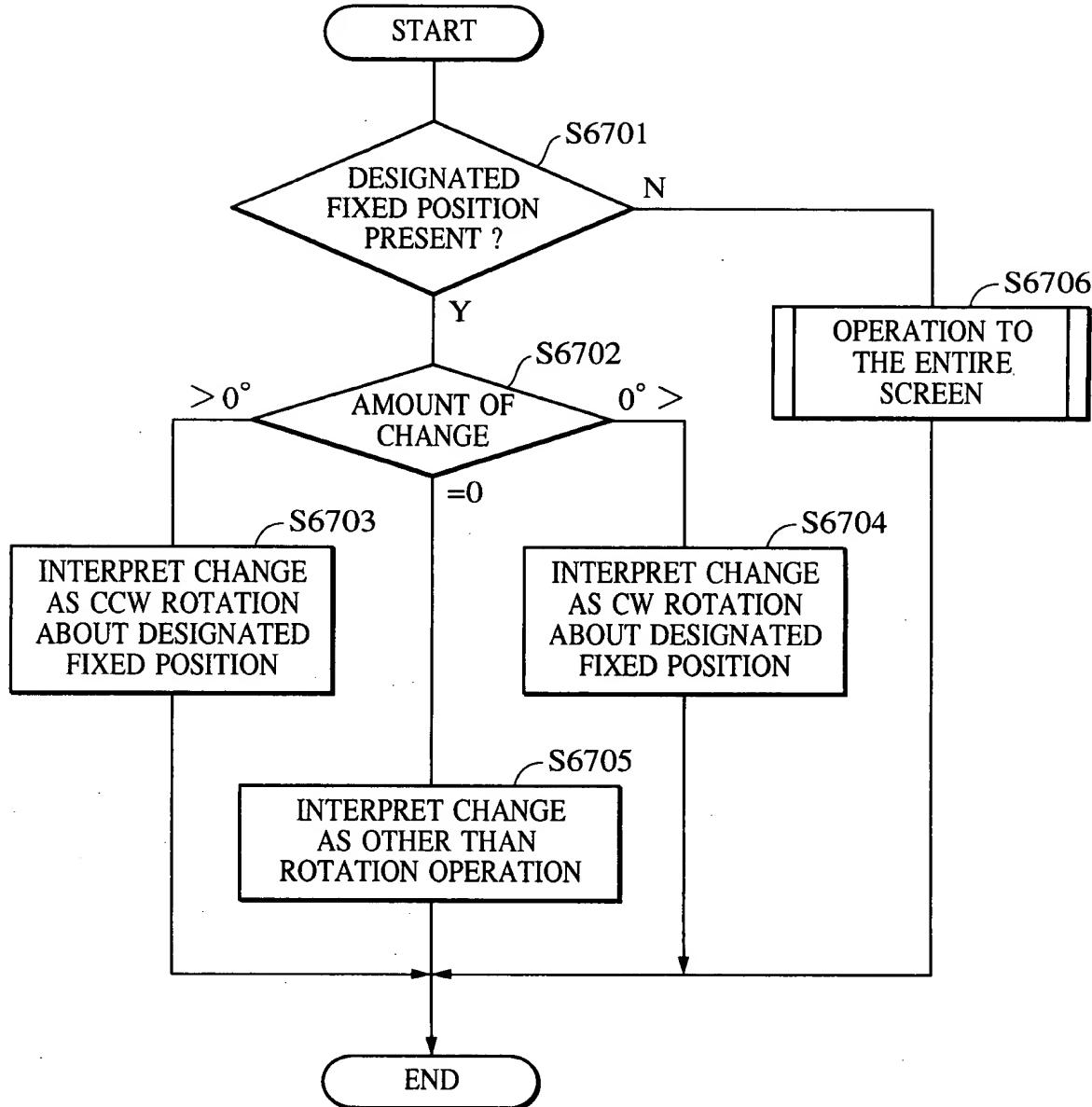


FIG. 67

CW ROTATION OPERATION

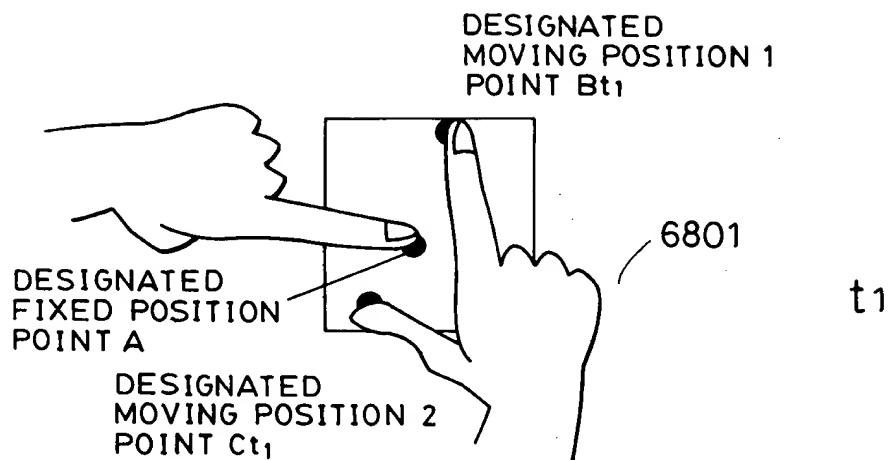


FIG. 68A

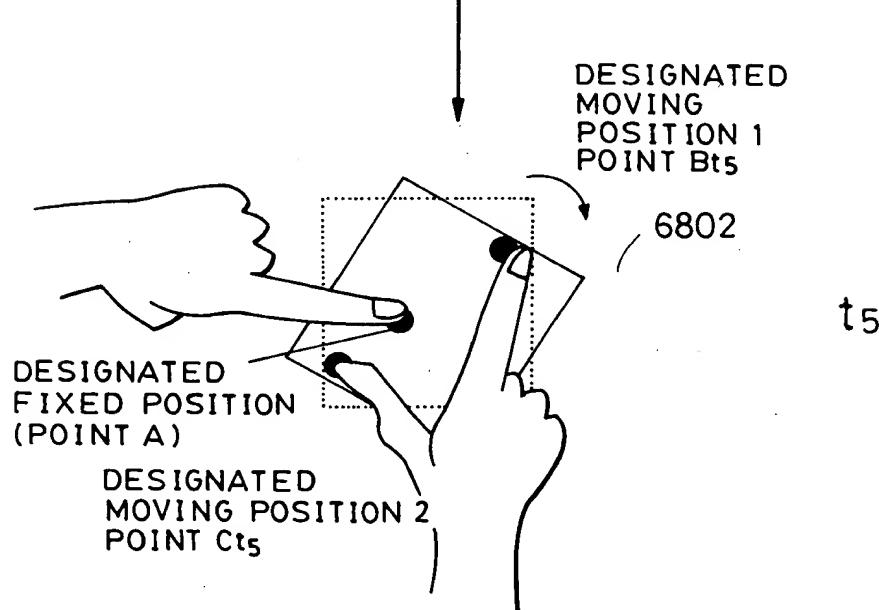


FIG. 68B

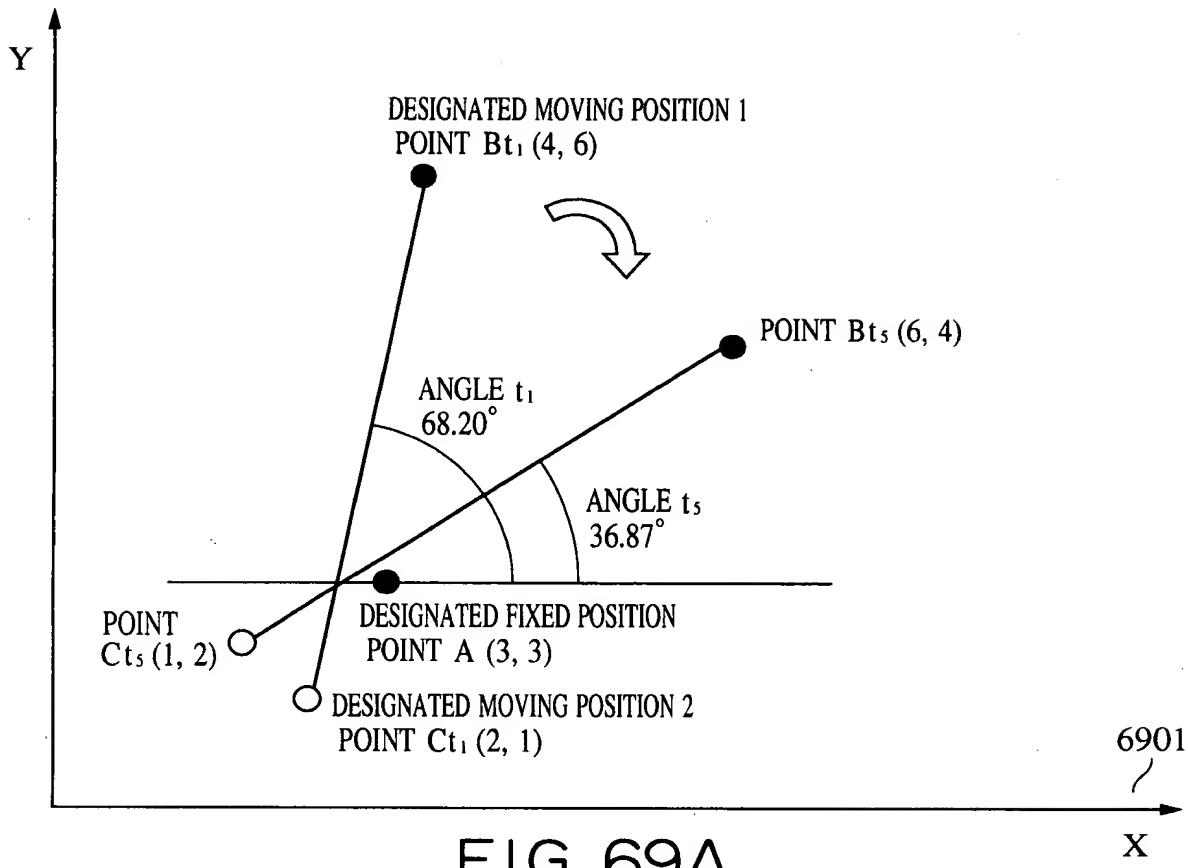


FIG. 69A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _x	A _y
t_1	3	3
t_2	3	3
t_3	3	3
t_4	3	3
t_5	3	3

FIG. 69B

DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	B _x	B _y
t_1	4.0	6.0
t_2	4.5	5.5
t_3	5.0	5.0
t_4	5.5	4.5
t_5	6.0	4.0

FIG. 69C

DESIGNATED MOVING POSITION
POSITION DATA OF POINT C

	C _x	C _y
t_1	2	1
t_2	1.8	1.2
t_3	1.6	1.5
t_4	1.4	1.8
t_5	1	2

6902

FIG. 69D

DATA OF CHANGE IN ANGLE OF DESIGNATED MOVING POSITIONS

	ANGLE OF DESIGNATED MOVING POSITION	AMOUNT OF CHANGE
t_1	68.20	0.00
t_2	60.95	-7.25
t_3	53.13	-15.07
t_4	45.00	-23.20
t_5	36.87	-31.33

6903

FIG. 69E

CCW ROTATION OPERATION

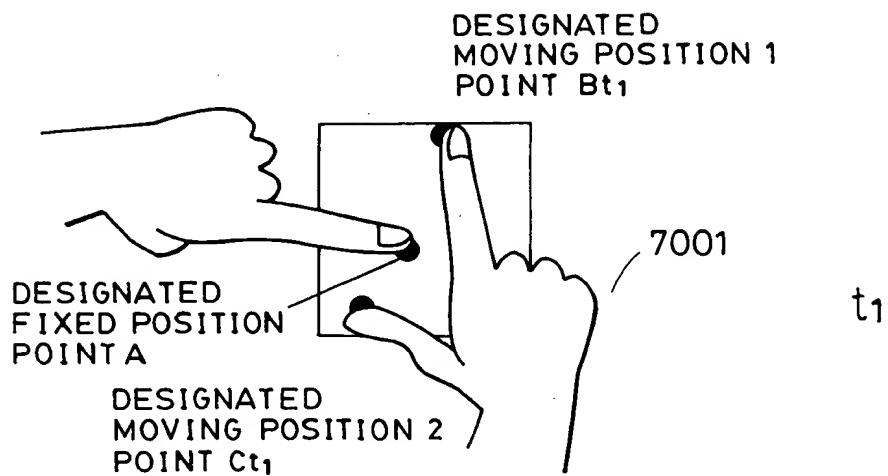


FIG. 70A

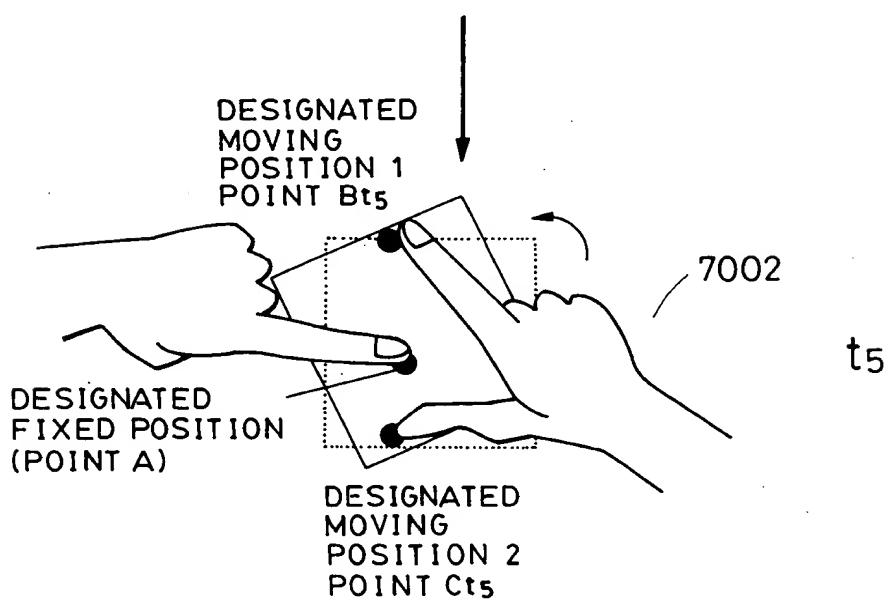


FIG. 70B

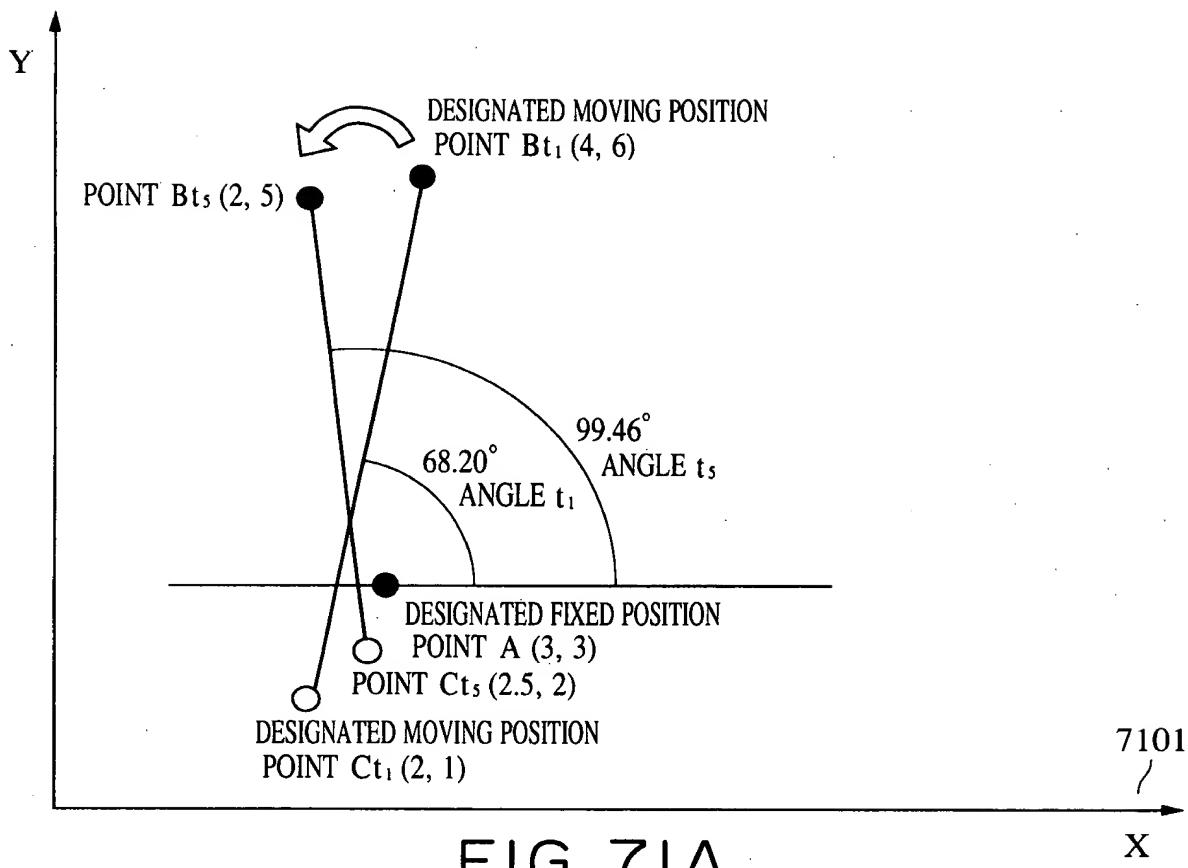


FIG. 71A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A_x	A_y
t_1	3	3
t_2	3	3
t_3	3	3
t_4	3	3
t_5	3	3

DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	B_x	B_y
t_1	4.0	6.0
t_2	3.5	5.8
t_3	3.0	5.4
t_4	2.5	5.2
t_5	2.0	5.0

DESIGNATED MOVING POSITION
POSITION DATA OF POINT C

	C_x	C_y
t_1	2	1
t_2	2.1	1.2
t_3	2.3	1.5
t_4	2.4	1.8
t_5	2.5	2

7102

FIG. 71B

FIG. 71C

FIG. 71D

DATA OF CHANGE IN ANGLE OF DESIGNATED MOVING POSITIONS

	ANGLE OF DESIGNATED MOVING POSITION	AMOUNT OF CHANGE
t_1	68.20	0.00
t_2	73.07	4.87
t_3	79.82	11.63
t_4	88.32	20.12
t_5	99.46	31.26

7103

FIG. 71E

ROTATION OPERATION ABOUT THE CENTER OF GRAVITY OF DESIGNATED MOVING POSITION

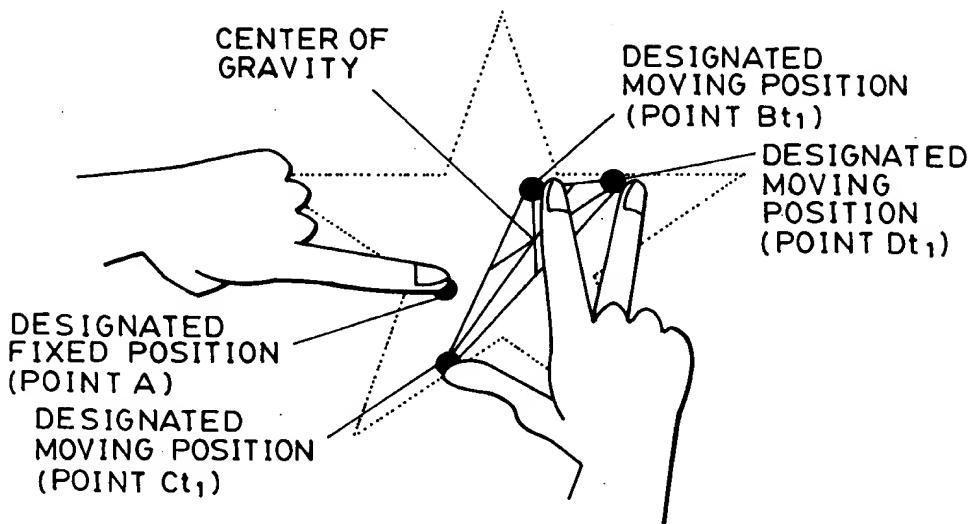


FIG. 72A

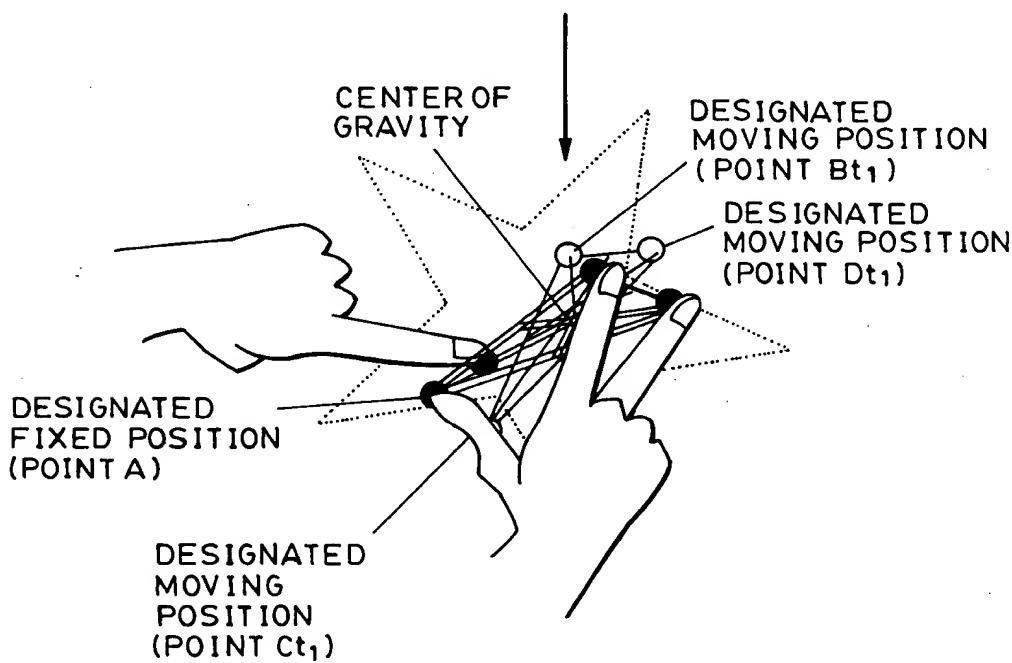


FIG. 72B

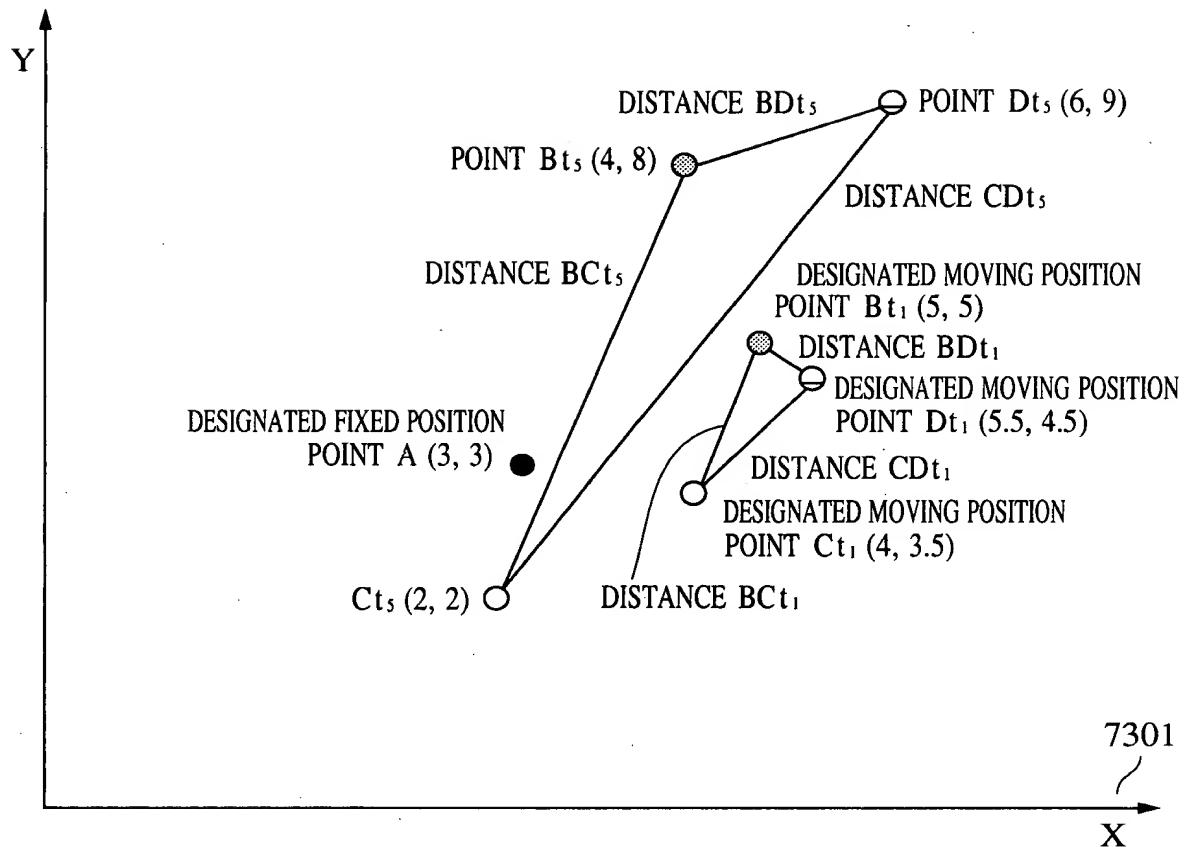


FIG. 73A

FIG. 73B
DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _x	A _y
B _x	B _y	
t ₁	3	3
t ₁	5.0	5.0
t ₂	3	3
t ₂	4.7	5.8
t ₃	3	3
t ₃	4.4	6.3
t ₄	3	3
t ₄	4.2	7.2
t ₅	3	3
t ₅	4.0	8.0

FIG. 73C
DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	C _x	C _y
t ₁	4.0	3.5
t ₂	3.8	3.3
t ₃	3.4	2.8
t ₄	2.8	2.3
t ₅	2.0	2.0

FIG. 73D
DESIGNATED MOVING POSITION
POSITION DATA OF POINT C

	D _x	D _y
t ₁	5.5	4.5
t ₂	5.6	6.0
t ₃	5.8	7.0
t ₄	5.9	8.0
t ₅	6.0	9.0

FIG. 73E
FIG. 73F
DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

7303				
DATA OF CHANGE IN DESIGNATED POSITION-TO-POSITION DISTANCE				
DATA OF CHANGE IN DESIGNATED POSITION-TO-POSITION DISTANCE		DATA OF CHANGE IN DESIGNATED POSITION-TO-POSITION DISTANCE		
DISTANCE BETWEEN B AND C (DISTANCE t _n / DISTANCE t ₁)	MAGNIFICATION BETWEEN B AND D (DISTANCE t _n / DISTANCE t ₁)	DISTANCE BETWEEN C AND D (DISTANCE t _n / DISTANCE t ₁)	MAGNIFICATION BETWEEN C AND D (DISTANCE t _n / DISTANCE t ₁)	
t ₁	1.803	100%	1.803	100%
t ₂	2.657	147%	3.245	180%
t ₃	3.640	202%	4.837	268%
t ₄	5.096	283%	6.488	360%
t ₅	6.325	351%	8.062	447%

FIG. 73G
FIG. 73H
DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

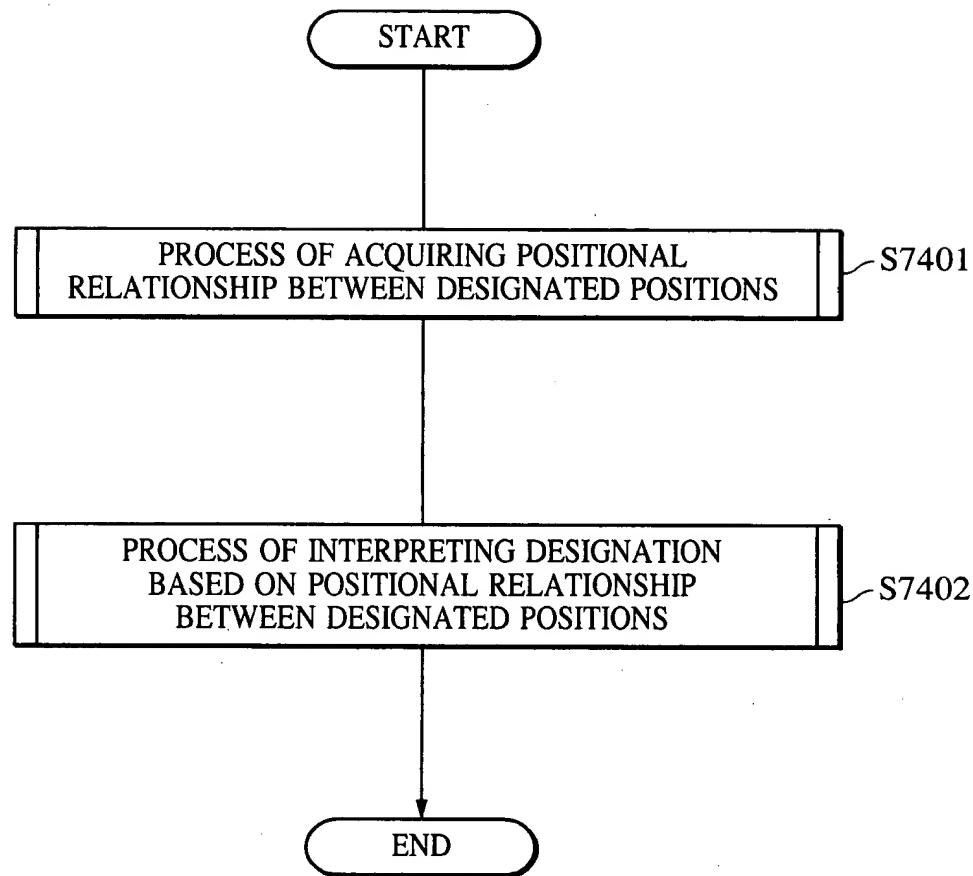


FIG. 74

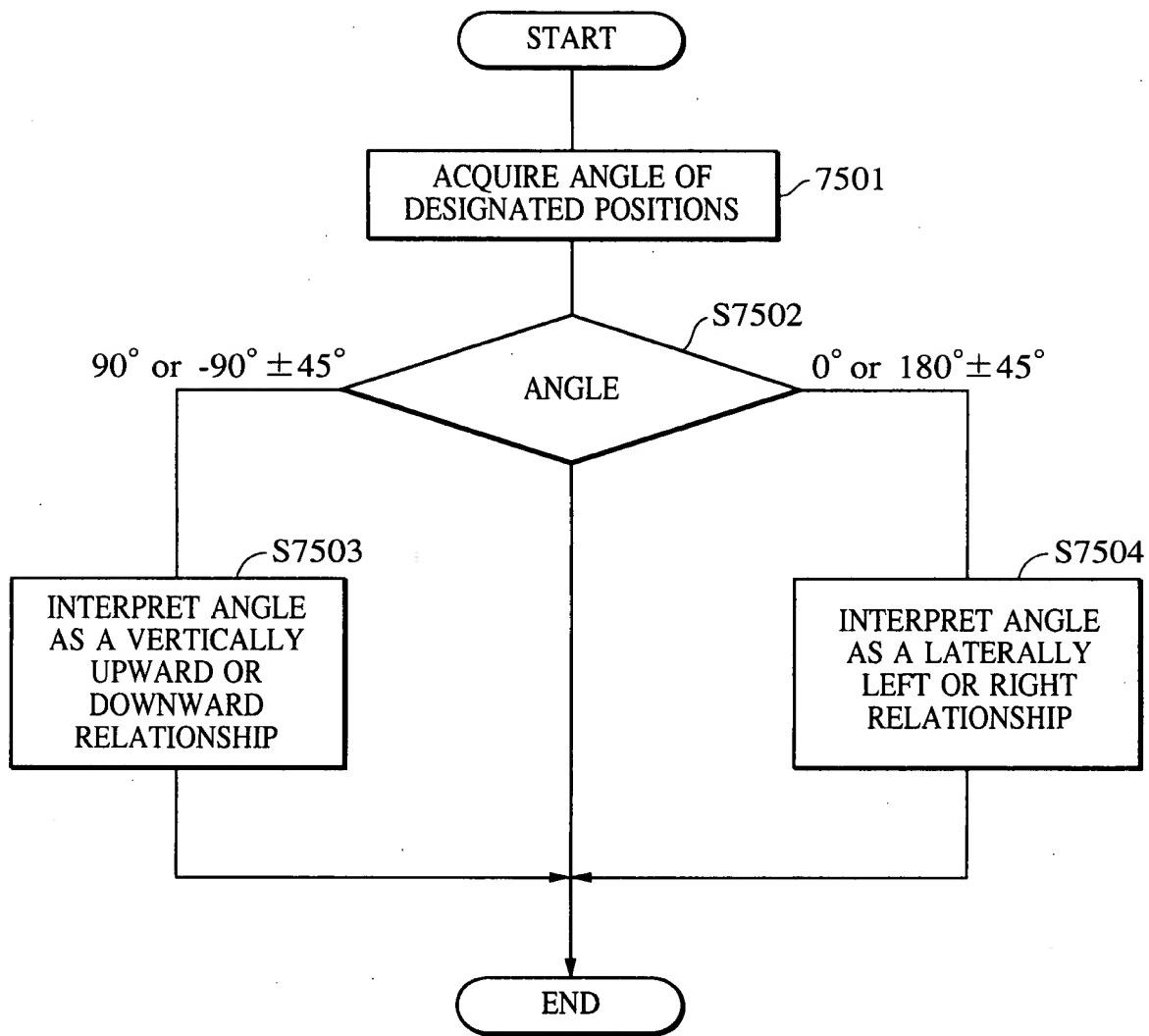


FIG. 75

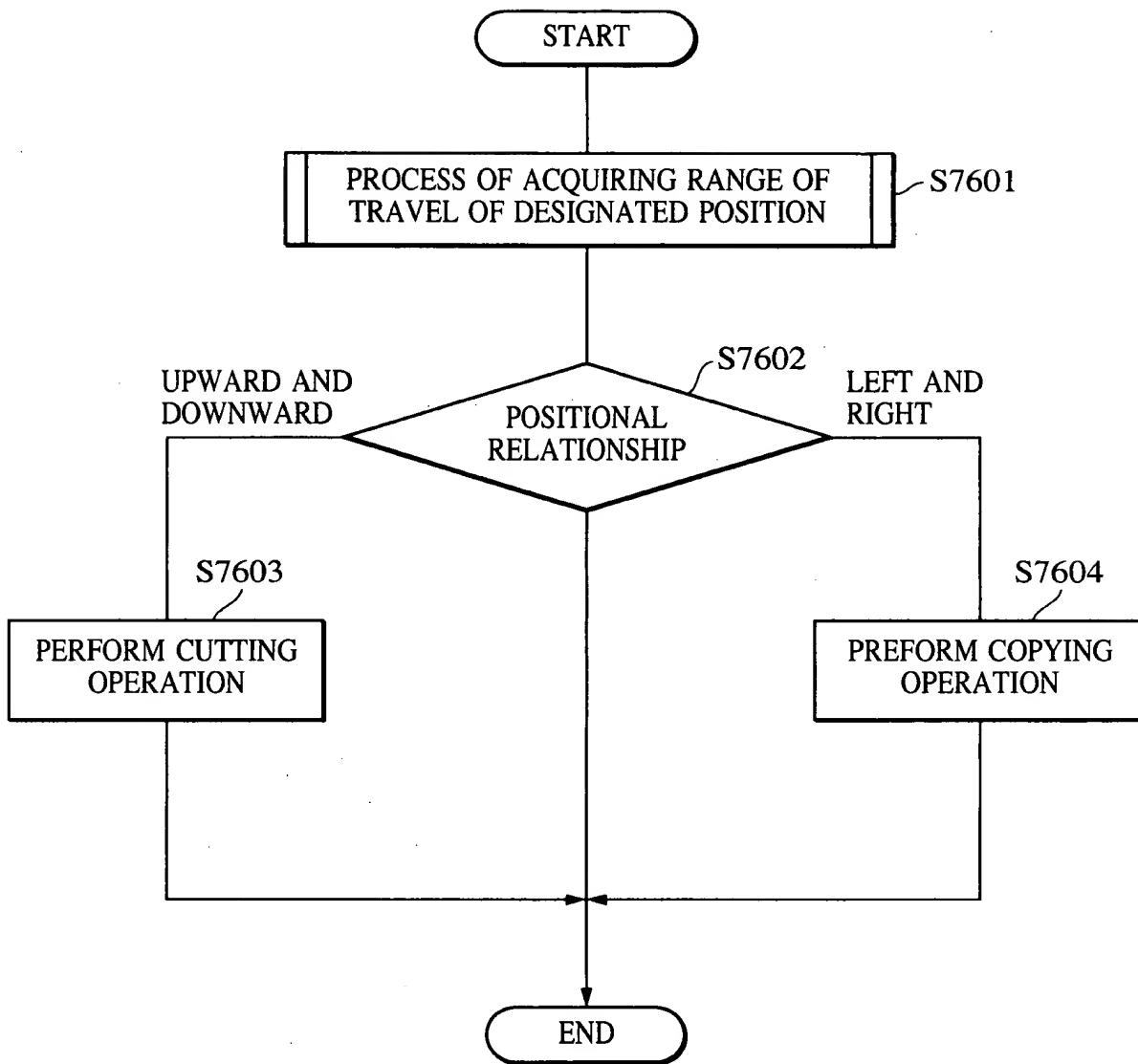


FIG. 76

PARALLEL TRAVEL WITH VERTICAL
RELATIONSHIP MAINTAINED

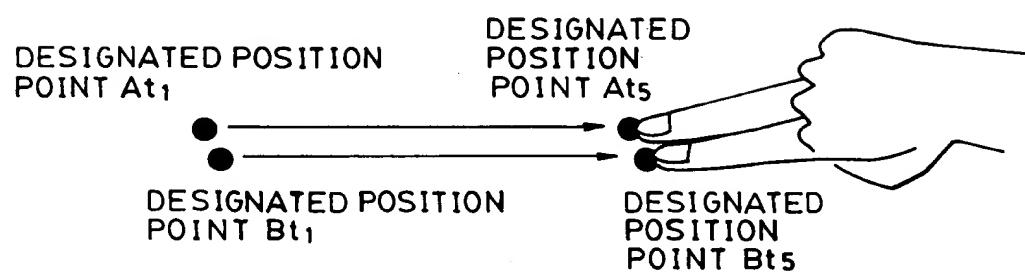


FIG. 77

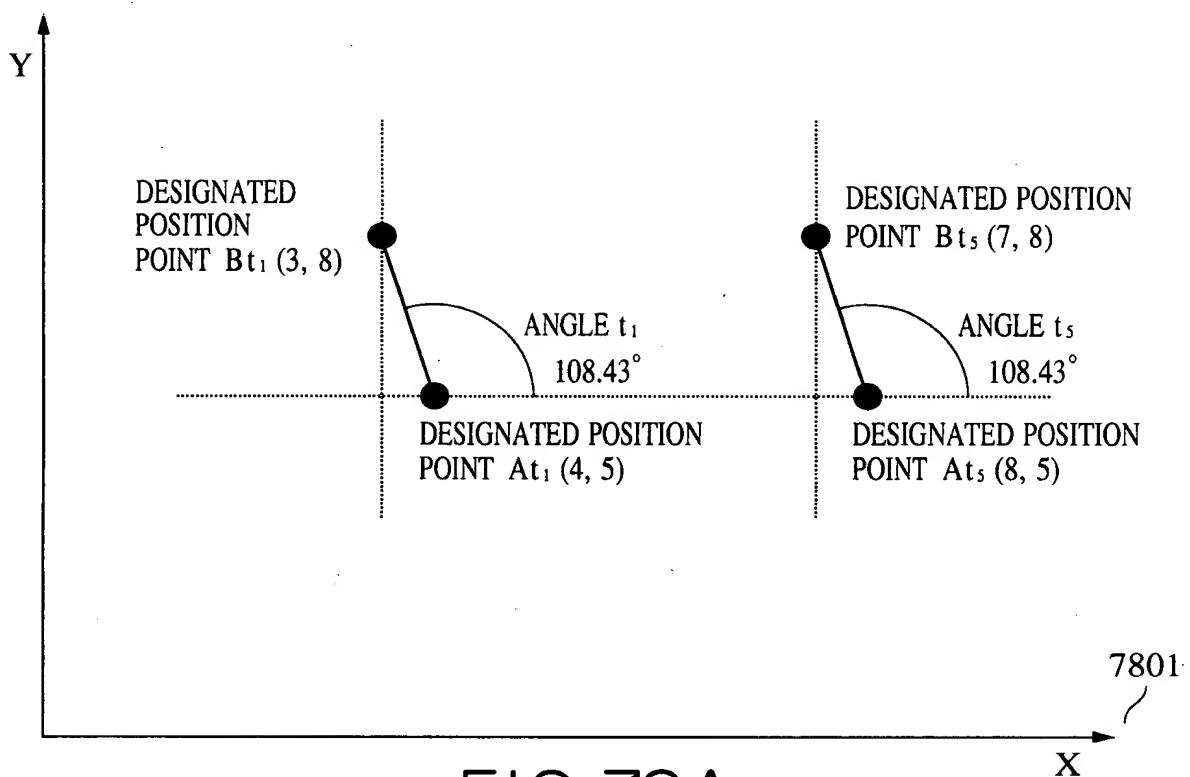


FIG. 78A

DESIGNATED POSITION
POSITION DATA OF POINT A

	A_x	A_y
t_1	4.0	5.0
t_2	5.0	5.0
t_3	6.0	5.0
t_4	7.0	5.0
t_5	8.0	5.0

FIG. 78B

DESIGNATED POSITION
POSITION DATA OF POINT B

	B_x	B_y
t_1	3.0	8.0
t_2	4.0	8.0
t_3	5.0	8.0
t_4	6.0	8.0
t_5	7.0	8.0

7802

FIG. 78C

POSITION DATA OF DESIGNATED POSITIONS

	ANGLE OF DESIGNATED POSITIONS
t_1	108.43
t_2	108.43
t_3	108.43
t_4	108.43
t_5	108.43

7803

FIG. 78D

PARALLEL TRAVEL WITH LATERAL
RELATIONSHIP MAINTAINED

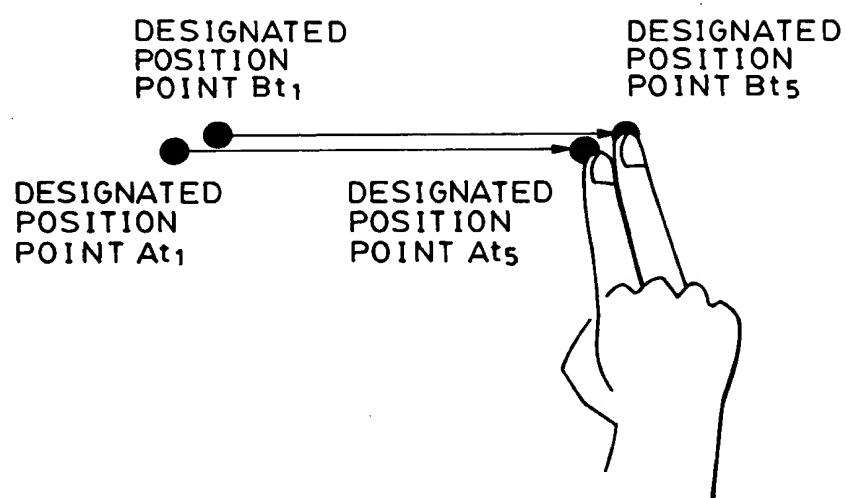


FIG. 79

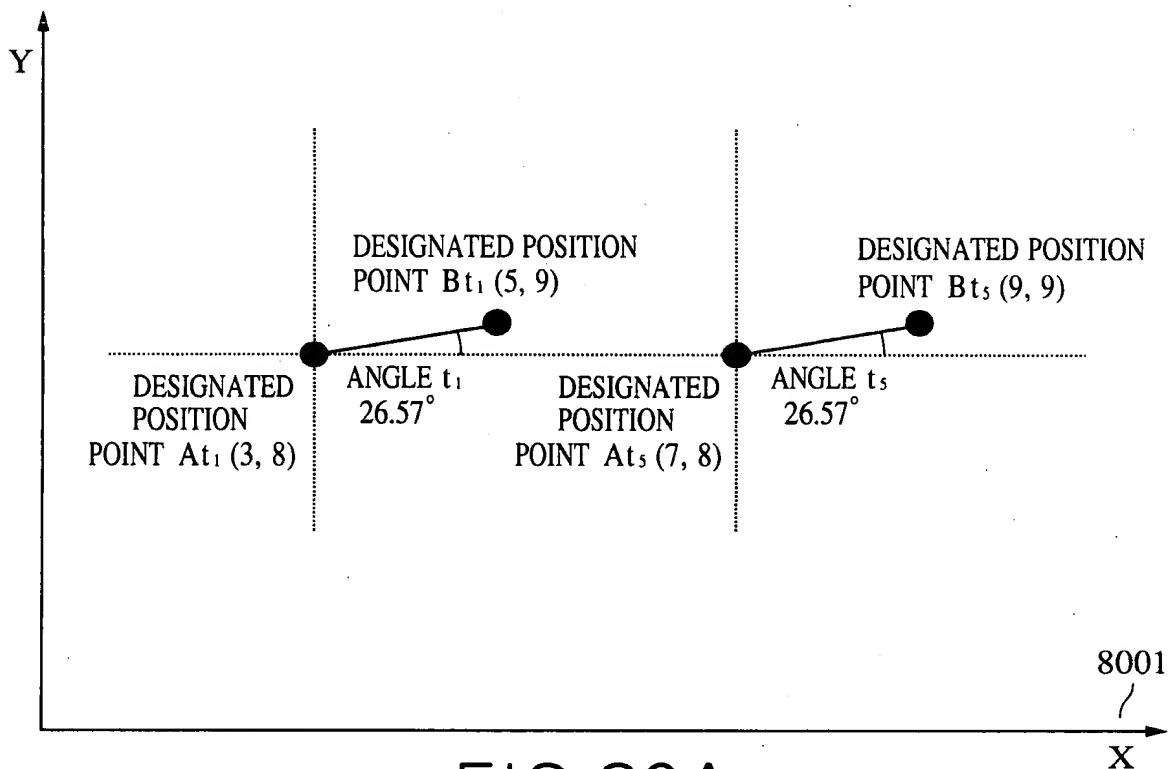


FIG. 80A

DESIGNATED POSITION
POSITION DATA OF POINT A

	A_x	A_y
t_1	3.0	8.0
t_2	4.0	8.0
t_3	5.0	8.0
t_4	6.0	8.0
t_5	7.0	8.0

FIG. 80B

DESIGNATED POSITION
POSITION DATA OF POINT B

	B_x	B_y
t_1	5.0	9.0
t_2	6.0	9.0
t_3	7.0	9.0
t_4	8.0	9.0
t_5	9.0	9.0

8002

FIG. 80C

POSITION DATA OF DESIGNATED POSITIONS

	ANGLE OF DESIGNATED POSITIONS
t_1	26.57
t_2	26.57
t_3	26.57
t_4	26.57
t_5	26.57

8003

FIG. 80D

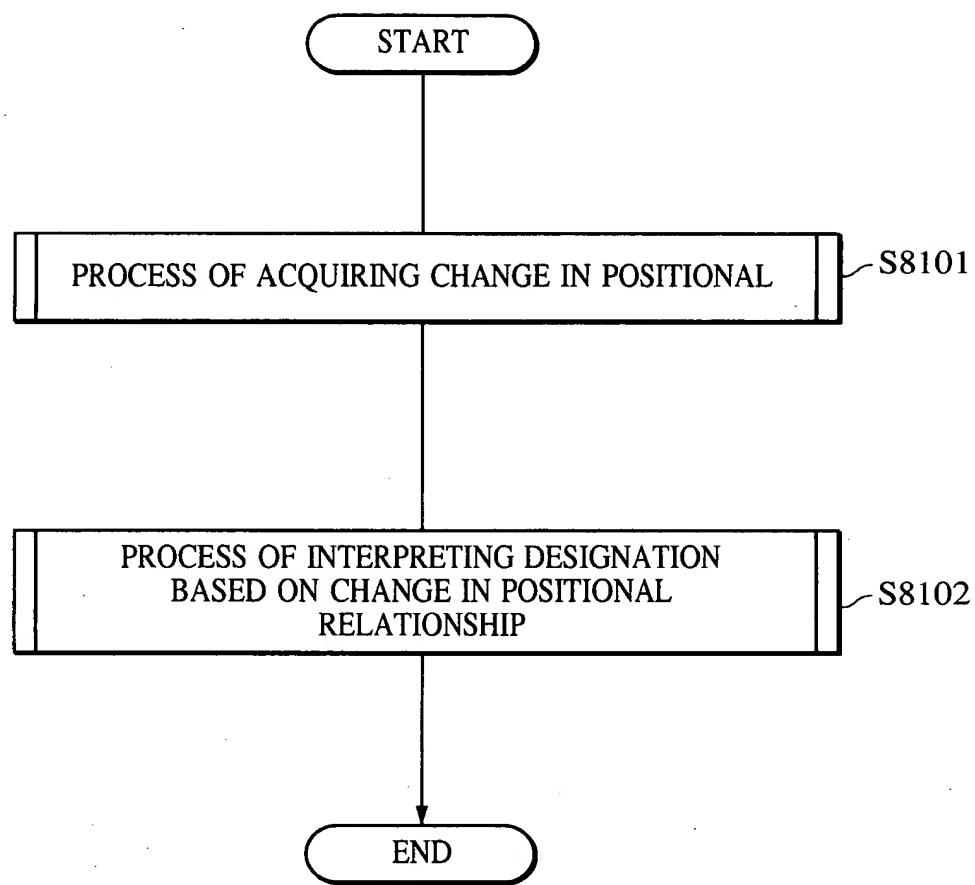


FIG. 81

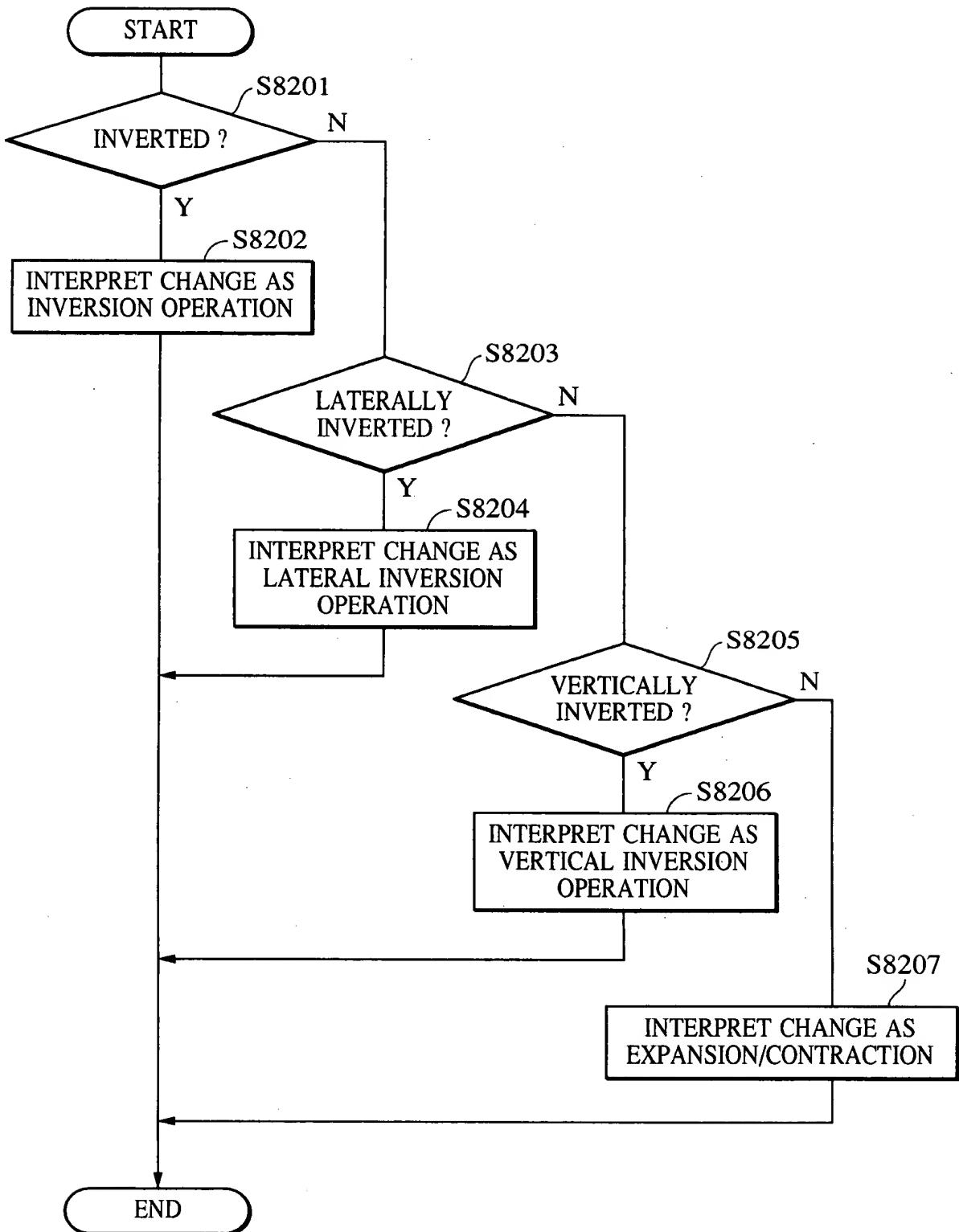


FIG. 82

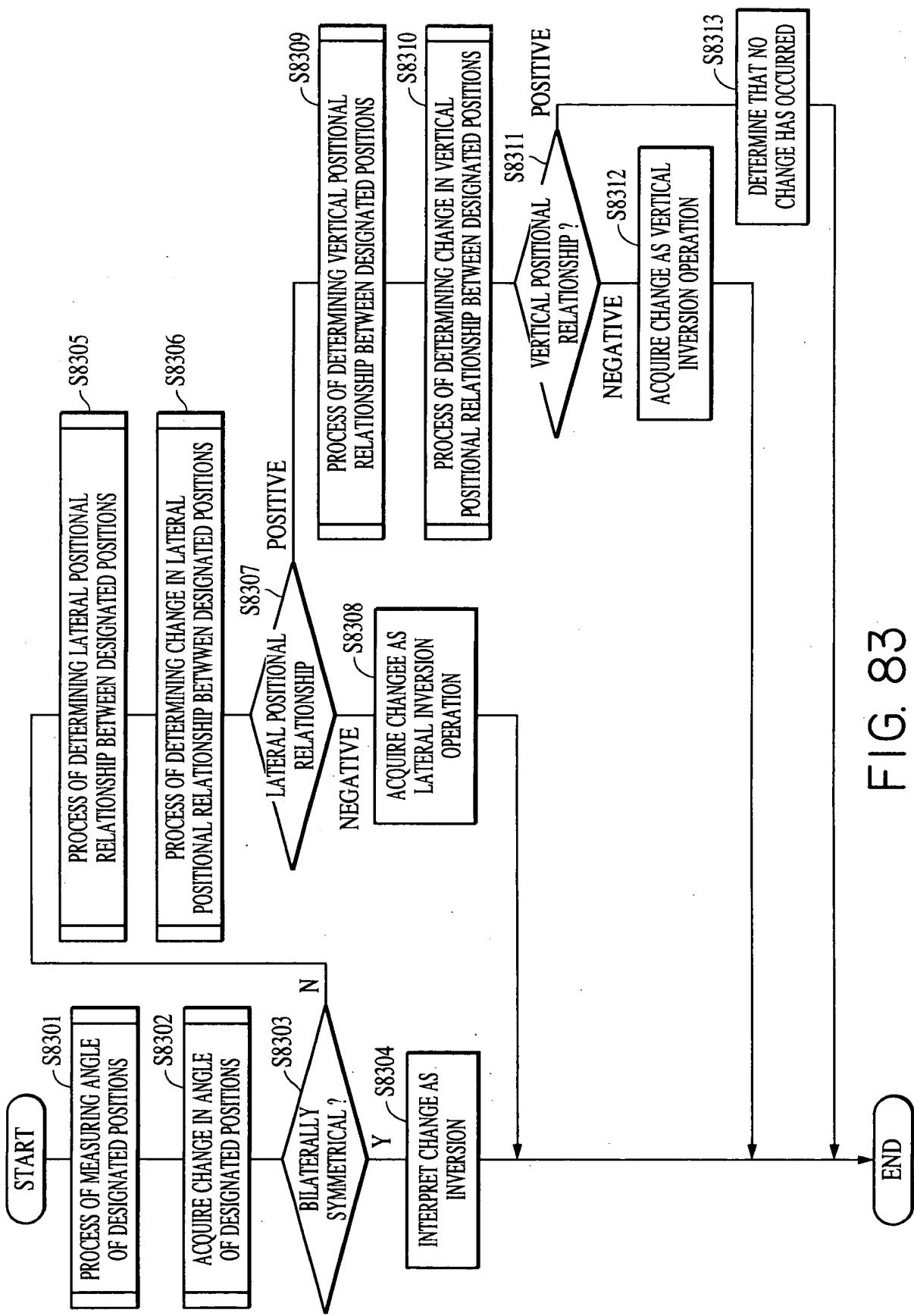


FIG. 83

REVERSAL OPERATION

DESIGNATED
POSITION
POINT At₁

DESIGNATED
POSITION
POINT Bt₁

DESIGNATED
POSITION
POINT Bt₅

DESIGNATED
POSITION
POINT At₅

8401

8402

FIG. 84A

FIG. 84B

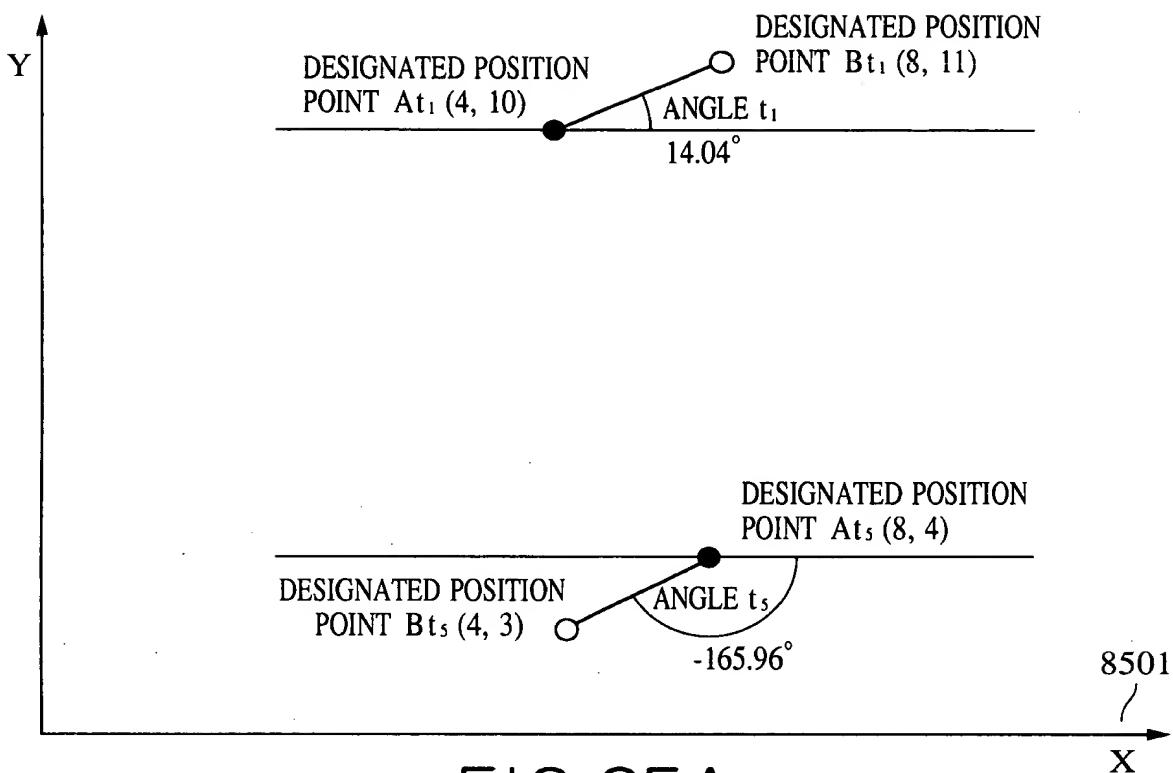


FIG. 85A

DESIGNATED POSITION
POSITION DATA OF POINT A

	A_x	A_y
t_1	4.0	10.0
t_2	5.0	8.0
t_3	6.0	6.0
t_4	7.0	5.0
t_5	8.0	4.0

DESIGNATED POSITION
POSITION DATA OF POINT B

	B_x	B_y
t_1	8.0	11.0
t_2	7.0	9.0
t_3	6.0	7.0
t_4	5.0	5.0
t_5	4.0	3.0

FIG. 85B

FIG. 85C

DATA OF CHANGE IN POSITIONAL RELATIONSHIP

	X DIRECTION	Y DIRECTION	ANGLE OF DESIGNATED POSITIONS	CHANGE IN POSITIONAL RELATIONSHIP
t_1	-4.0	-1.0	14.04	0.00
t_2	-2.0	-1.0	26.57	-12.53
t_3	0.0	-1.0	90.00	-75.99
t_4	2.0	0.0	180.00	-165.96
t_5	4.0	1.0	-165.96	180.00

8503

FIG. 85D

LATERAL INVERSION

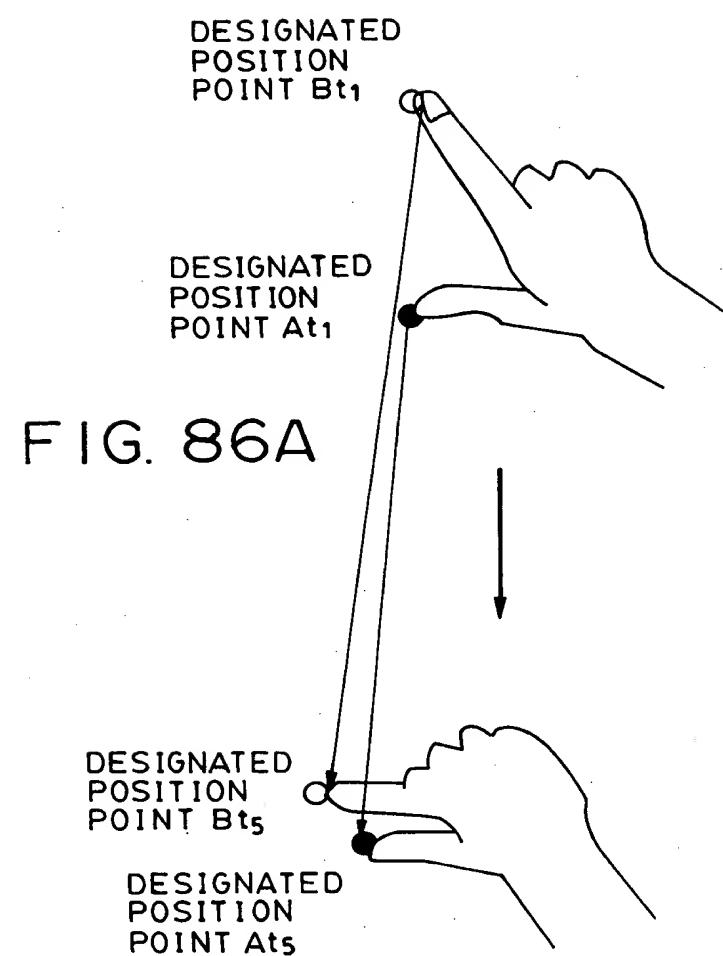


FIG. 86A

FIG. 86B

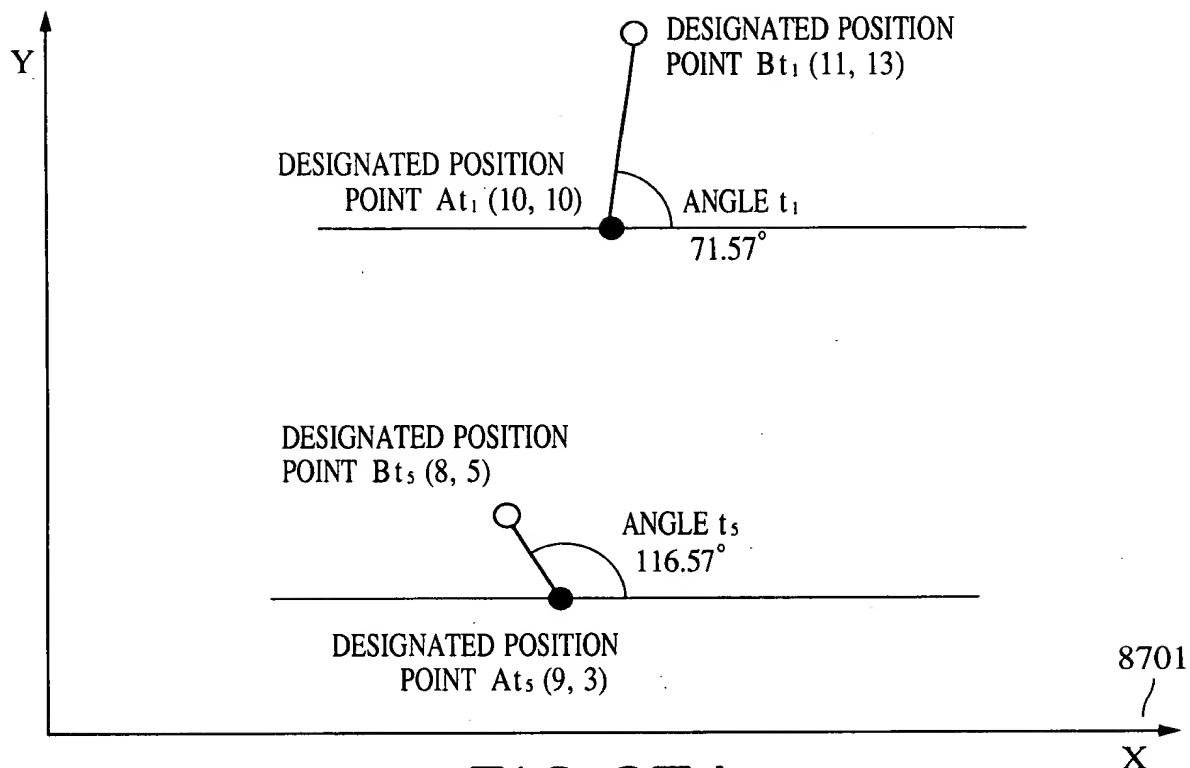


FIG. 87A

DESIGNATED POSITION
POSITION DATA OF POINT A

	A_x	A_y
t_1	10.0	10.0
t_2	9.8	8.0
t_3	9.6	6.0
t_4	9.3	5.0
t_5	9.0	3.0

DESIGNATED POSITION
POSITION DATA OF POINT B

	B_x	B_y
t_1	11.0	13.0
t_2	10.8	9.0
t_3	10.6	7.0
t_4	10.3	6.0
t_5	8.0	5.0

FIG. 87B

FIG. 87C

DATA OF CHANGE IN POSITIONAL RELATIONSHIP

	X DIRECTION	Y DIRECTION	ANGLE OF DESIGNATED POSITIONS	CHANGE IN POSITIONAL RELATIONSHIP
t_1	-1.0	-3.0	71.57	0.00
t_2	-1.0	-1.0	45.00	26.57
t_3	-1.0	-1.0	45.00	26.57
t_4	-1.0	-1.0	45.00	26.57
t_5	1.0	-2.0	116.57	45.00

8703

FIG. 87D

VERTICAL INVERSION

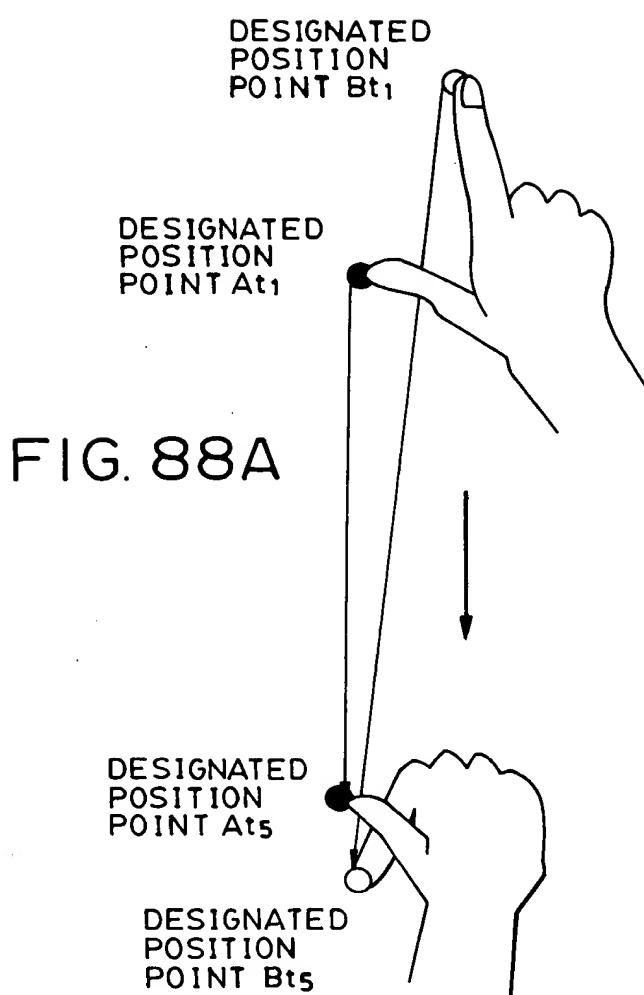


FIG. 88A

FIG. 88B

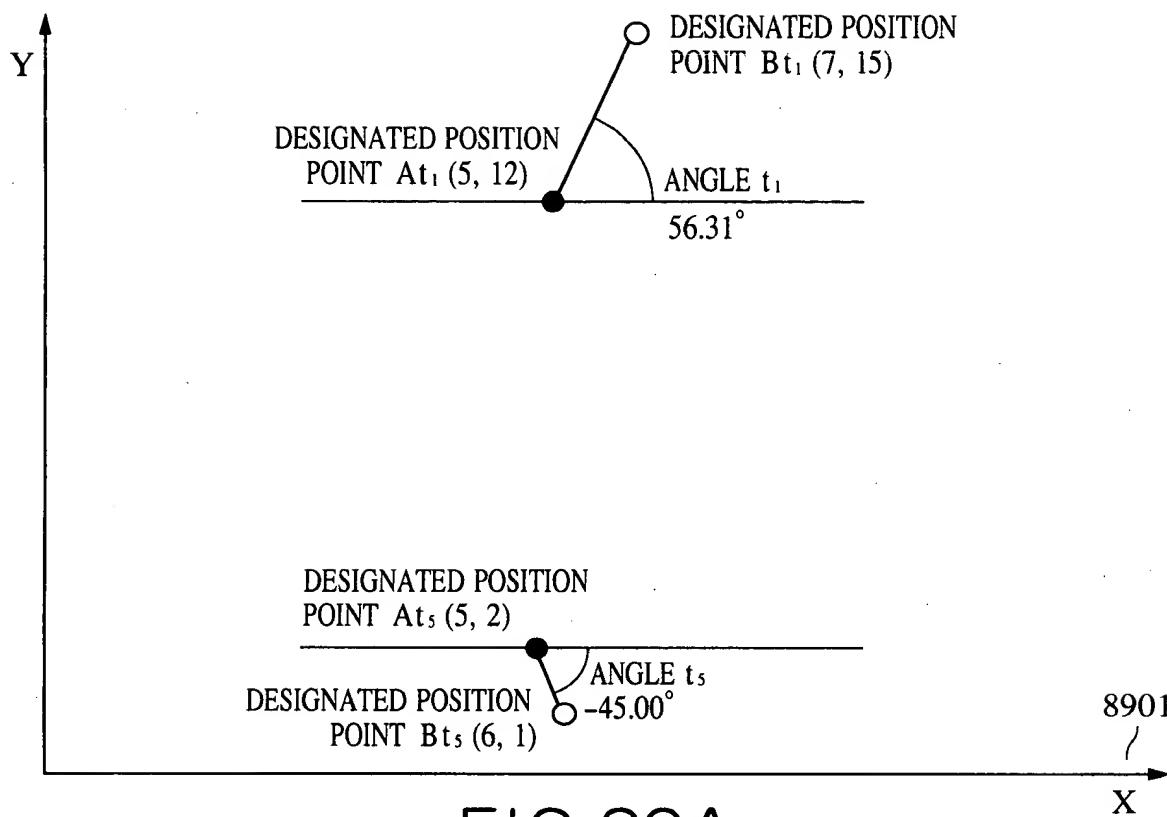


FIG. 89A

DESIGNATED POSITION
POSITION DATA OF POINT A

	A_x	A_y
t_1	5.0	12.0
t_2	5.0	9.0
t_3	5.0	6.0
t_4	5.0	3.0
t_5	5.0	2.0

DESIGNATED POSITION
POSITION DATA OF POINT B

	B_x	B_y
t_1	7.0	15.0
t_2	6.8	11.0
t_3	6.5	8.0
t_4	6.2	4.0
t_5	6.0	1.0

FIG. 89B

FIG. 89C

DATA OF CHANGE IN POSITIONAL RELATIONSHIP

	X DIRECTION	Y DIRECTION	ANGLE OF DESIGNATED POSITIONS	CHANGE IN POSITIONAL RELATIONSHIP
t_1	-2.0	-3.0	56.31°	0.00
t_2	-1.8	-2.0	48.01°	8.30
t_3	-1.5	-2.0	53.13°	3.18
t_4	-1.2	-1.0	39.81°	16.50
t_5	-1.0	1.0	-45.00°	101.31

8903

FIG. 89D

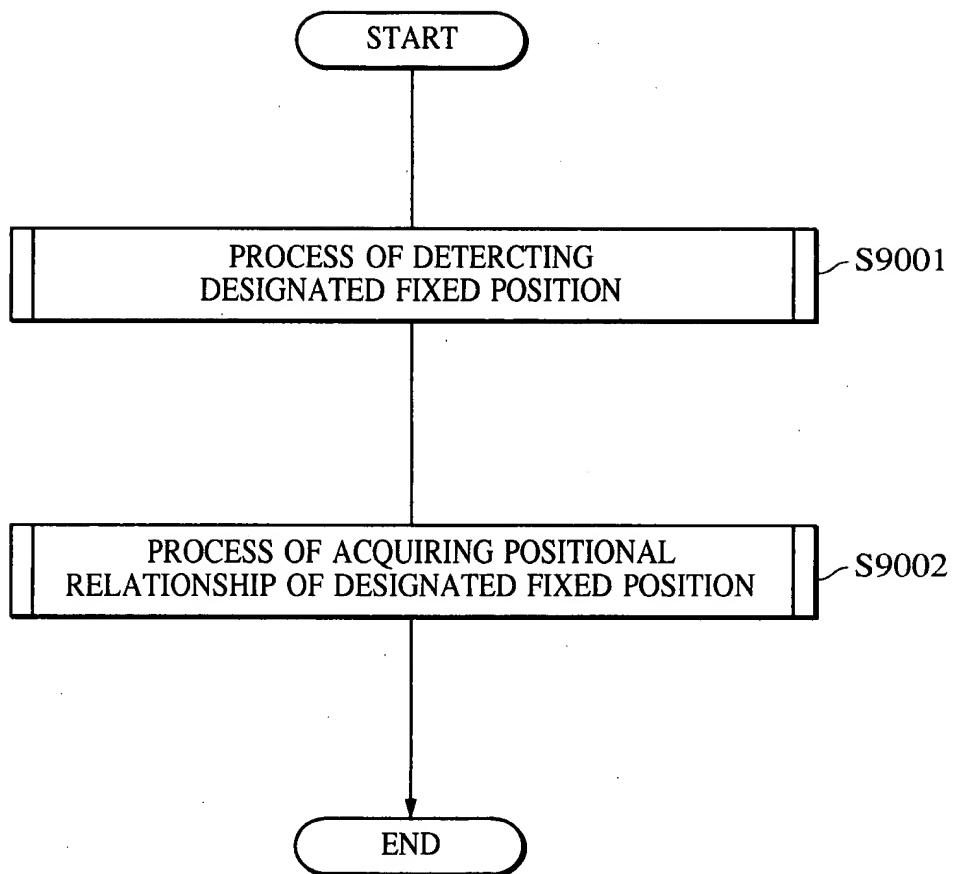


FIG. 90

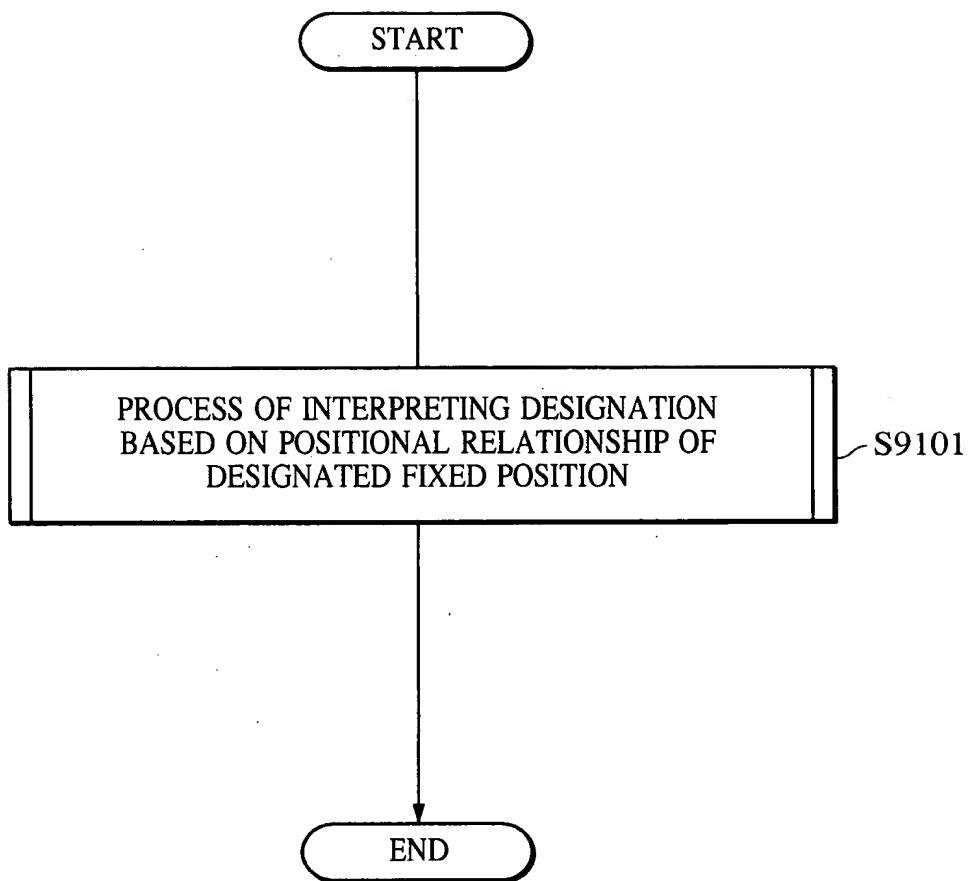


FIG. 91

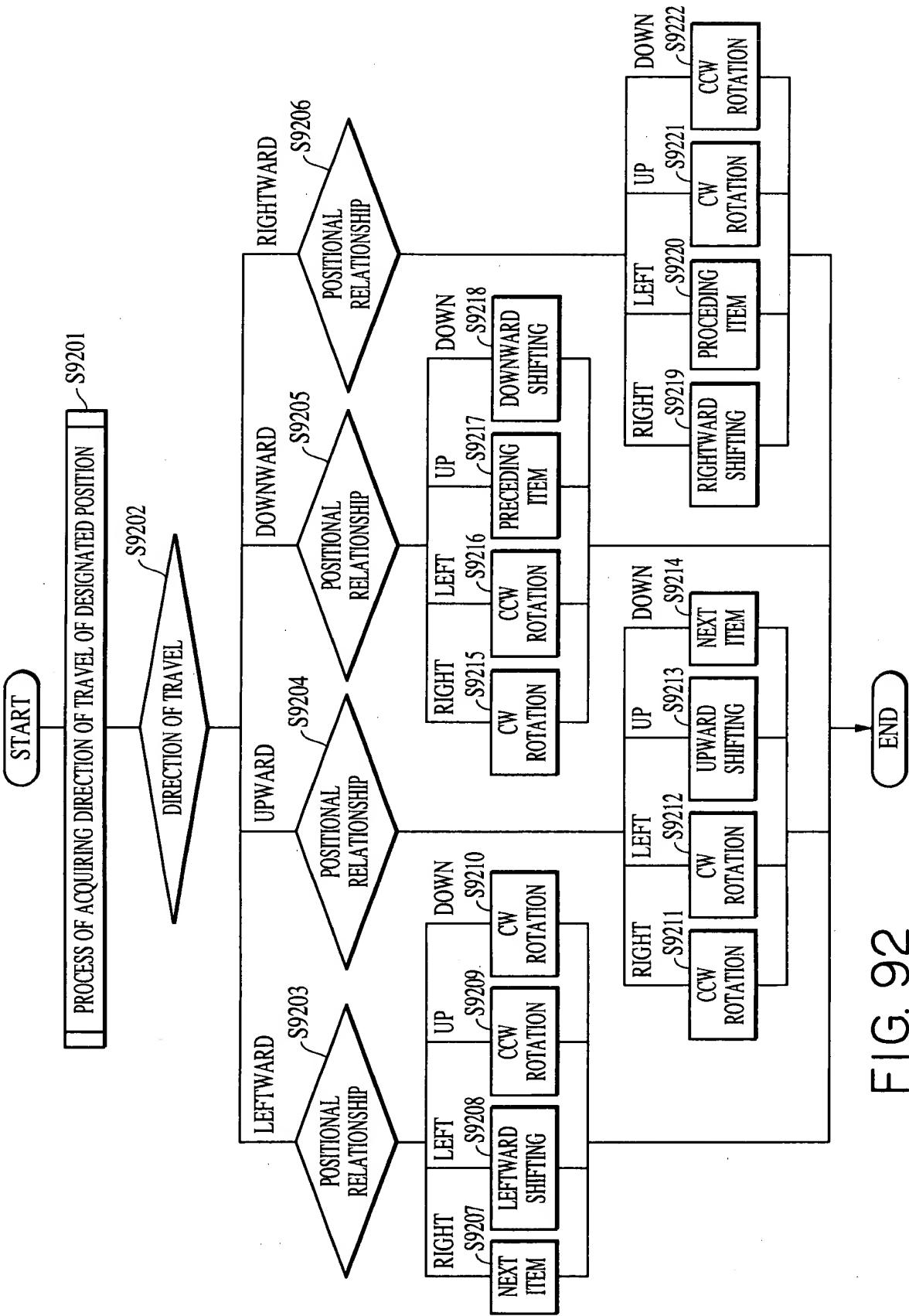


FIG. 92

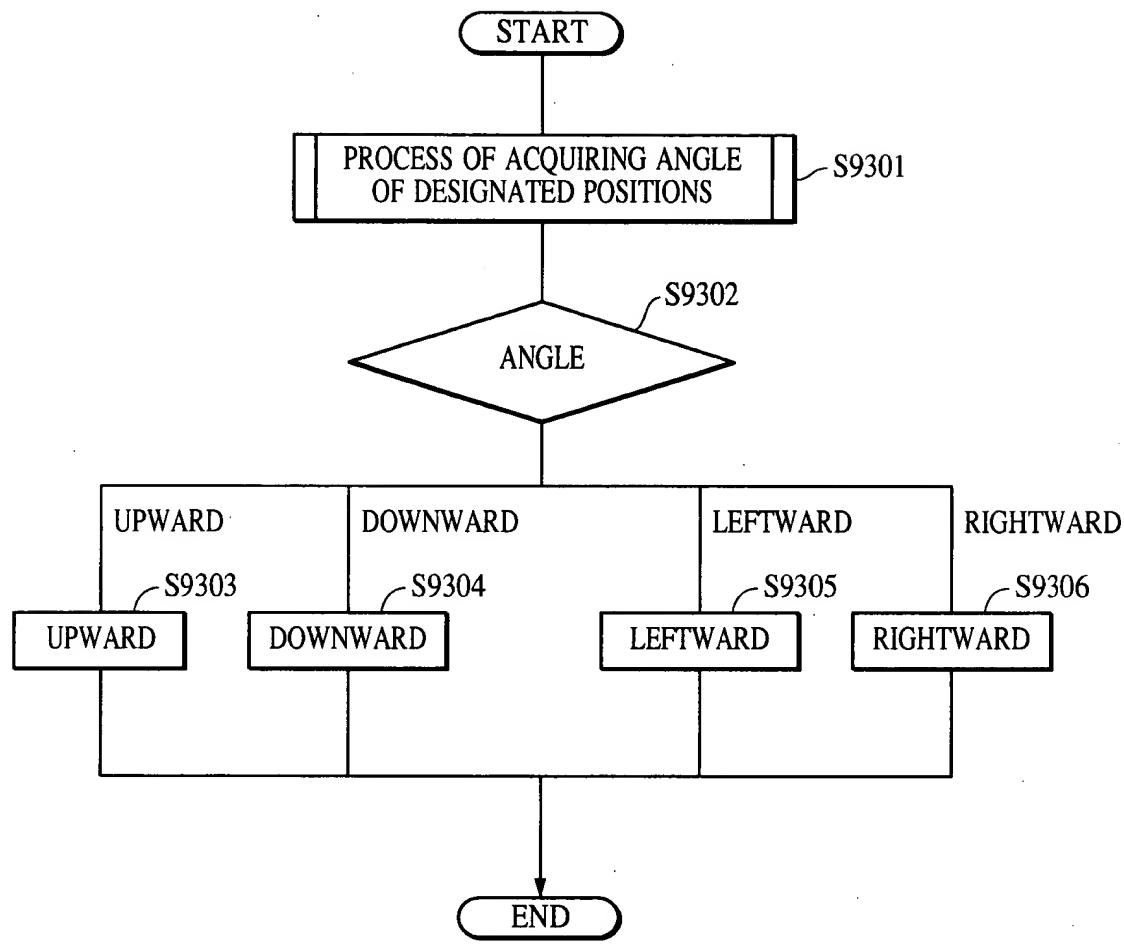


FIG. 93

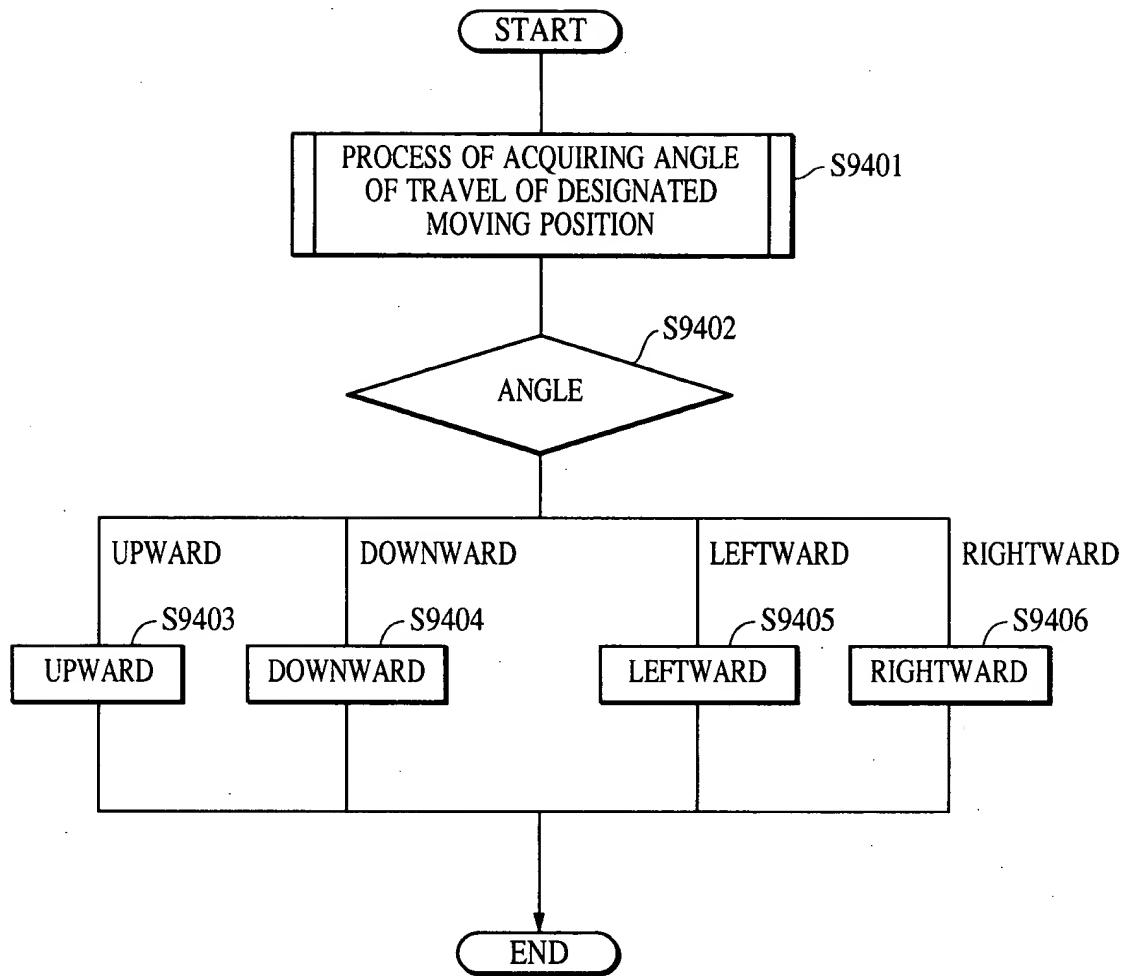


FIG. 94

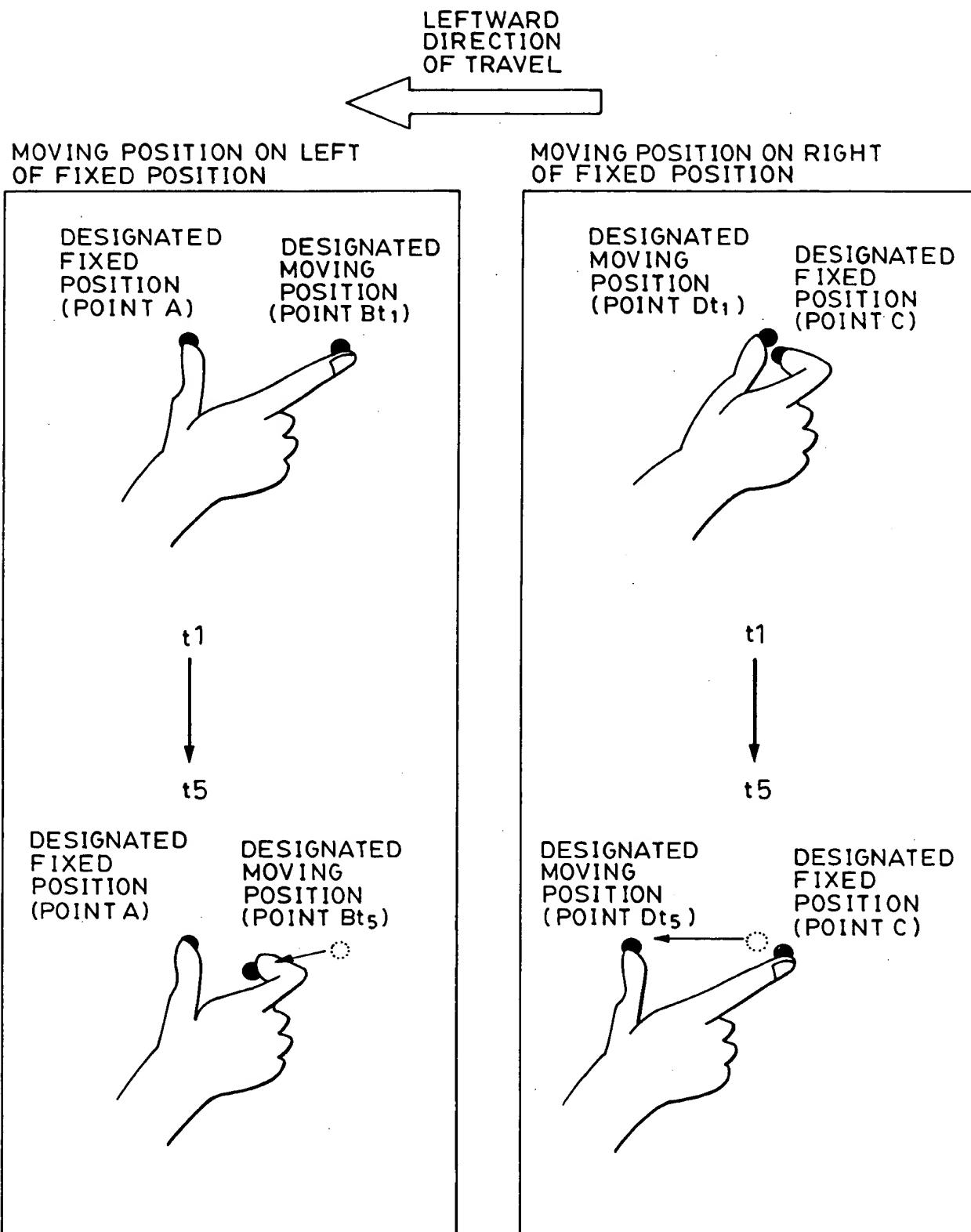


FIG. 95A

FIG. 95B

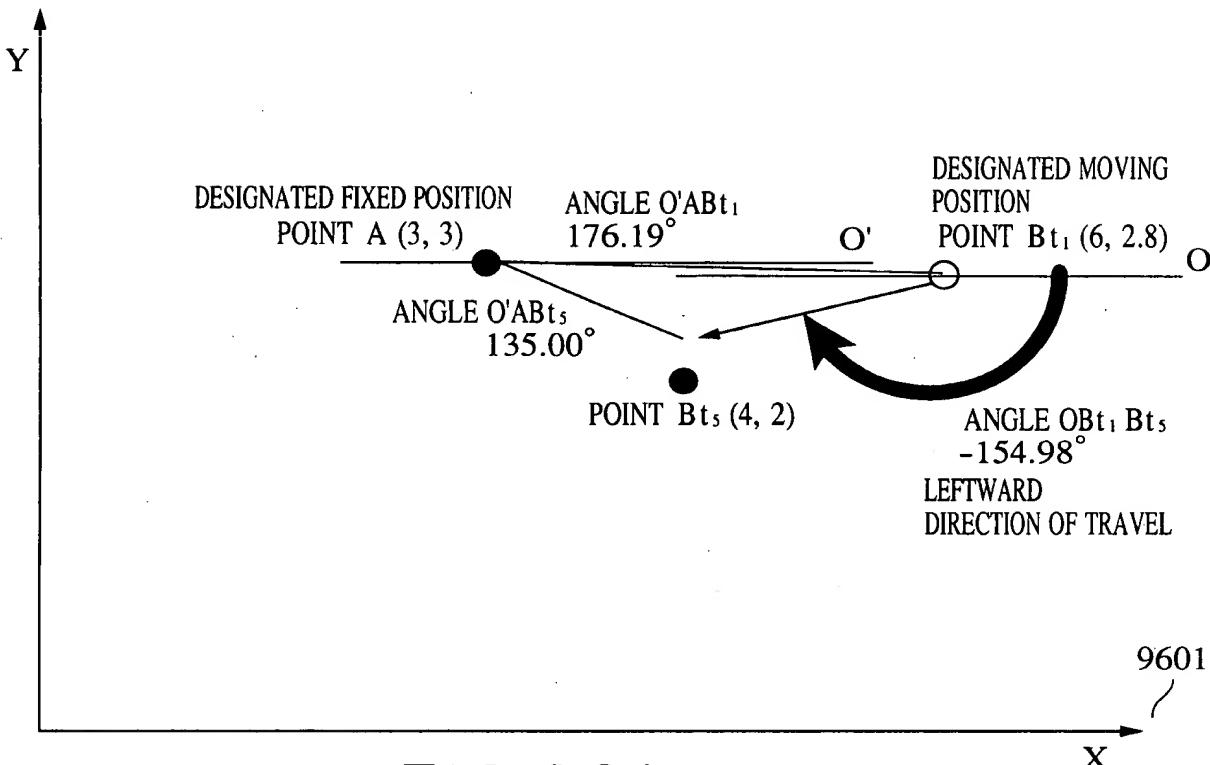


FIG. 96A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _x	A _y
t ₁	3	3
t ₂	3	3
t ₃	3	3
t ₄	3	3
t ₅	3	3

DESIGNATED MOVING POSITION
POSITION DATA OF POINT B

	B _x	B _y
t ₁	6.0	3.0
t ₂	5.3	2.3
t ₃	4.7	1.7
t ₄	4.3	1.2
t ₅	4.0	2.0

FIG. 96B

FIG. 96C

DATA OF TRAVEL OF DESIGNATED MOVING POSITION

	TRAVEL OF POINT A	TRAVEL OF POINT B	ANGLE OF DESIGNATED POSITIONS	DIRECTION OF TRAVEL
t ₁	0.000	0.000	176.19	-158.20
t ₂	0.000	0.000	163.30	-154.98
t ₃	0.000	1.729	142.05	-154.98
t ₄	0.000	2.310	126.53	-154.98
t ₅	0.000	2.154	135.00	-154.98

9603

FIG. 96D

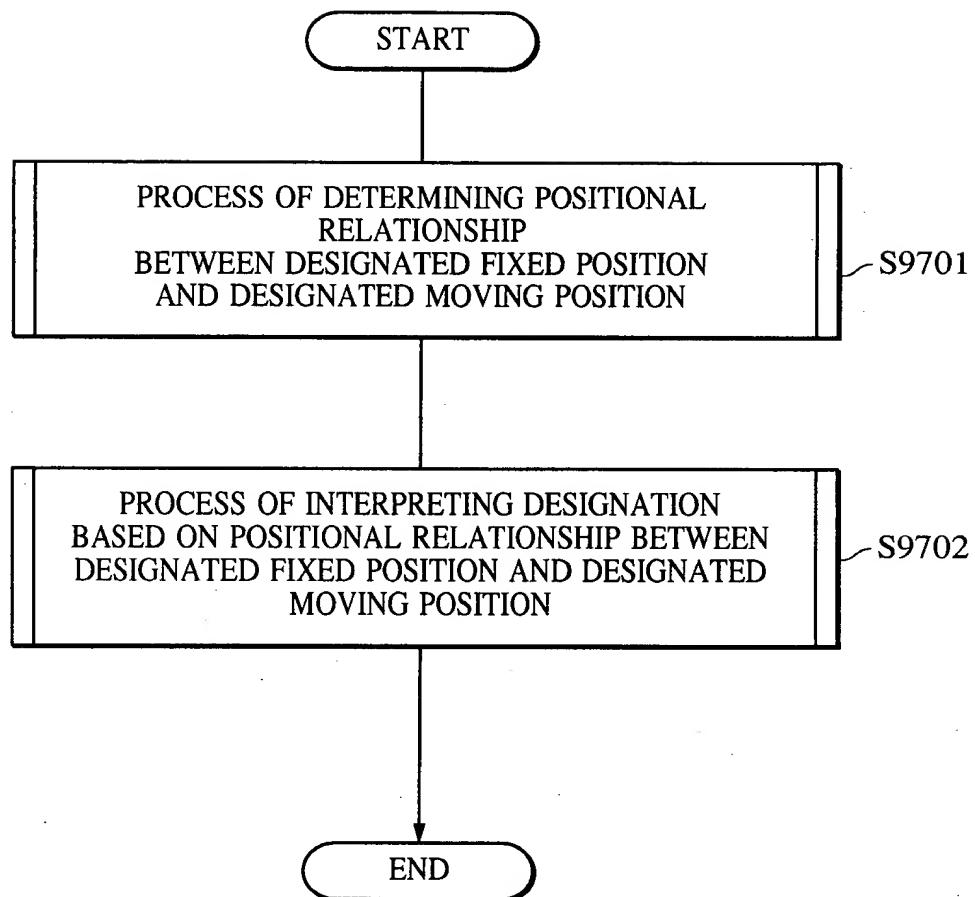


FIG. 97

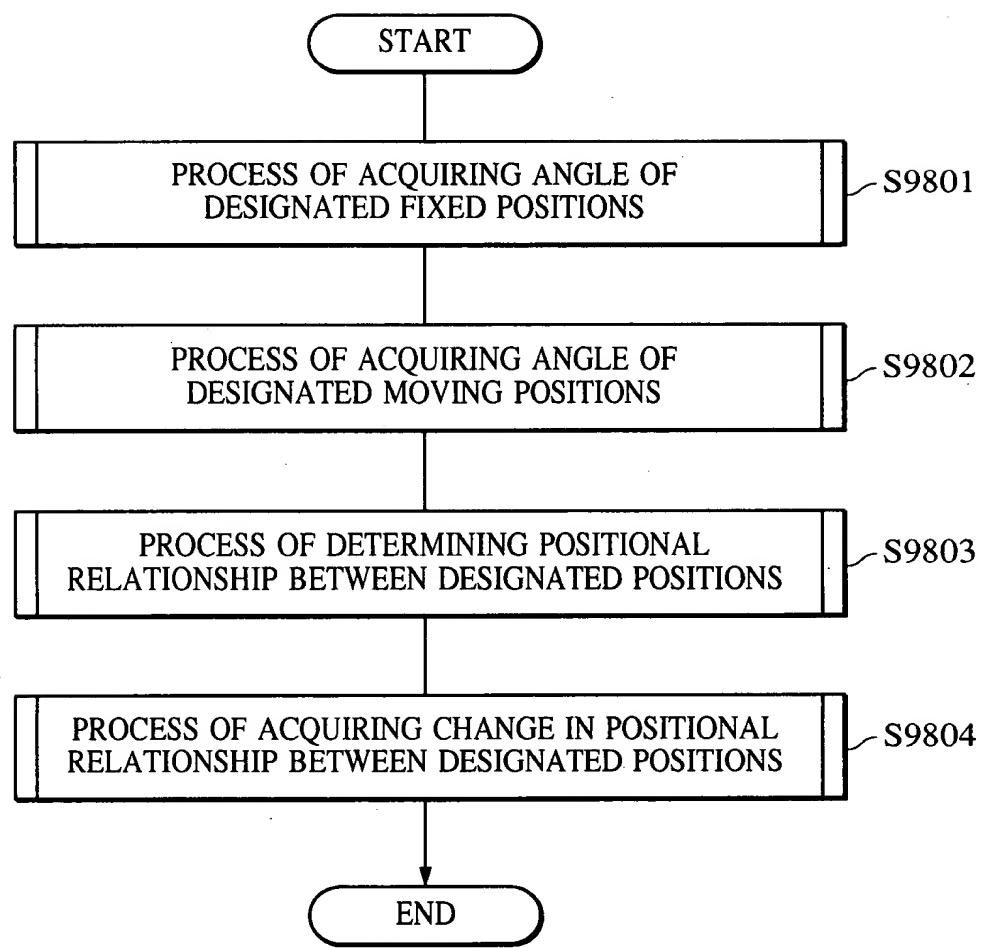


FIG. 98

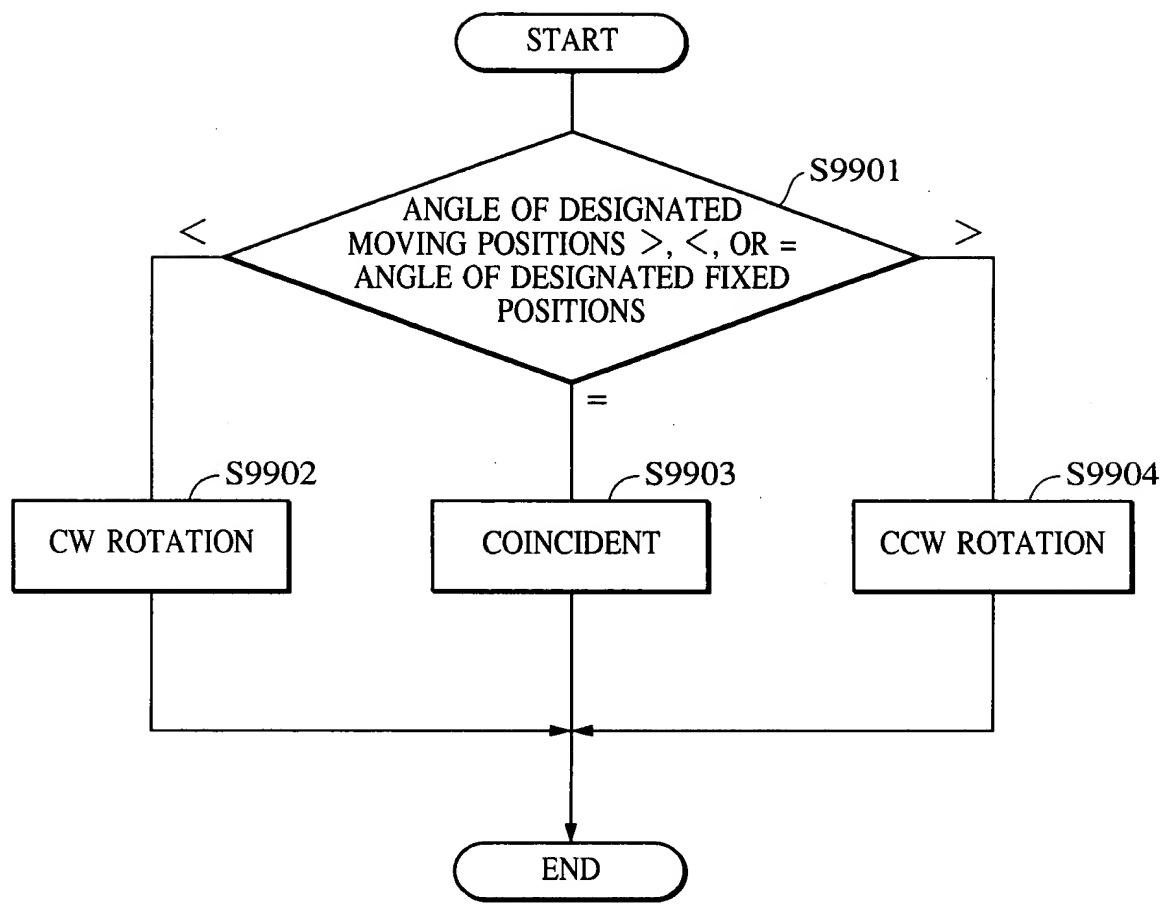


FIG. 99

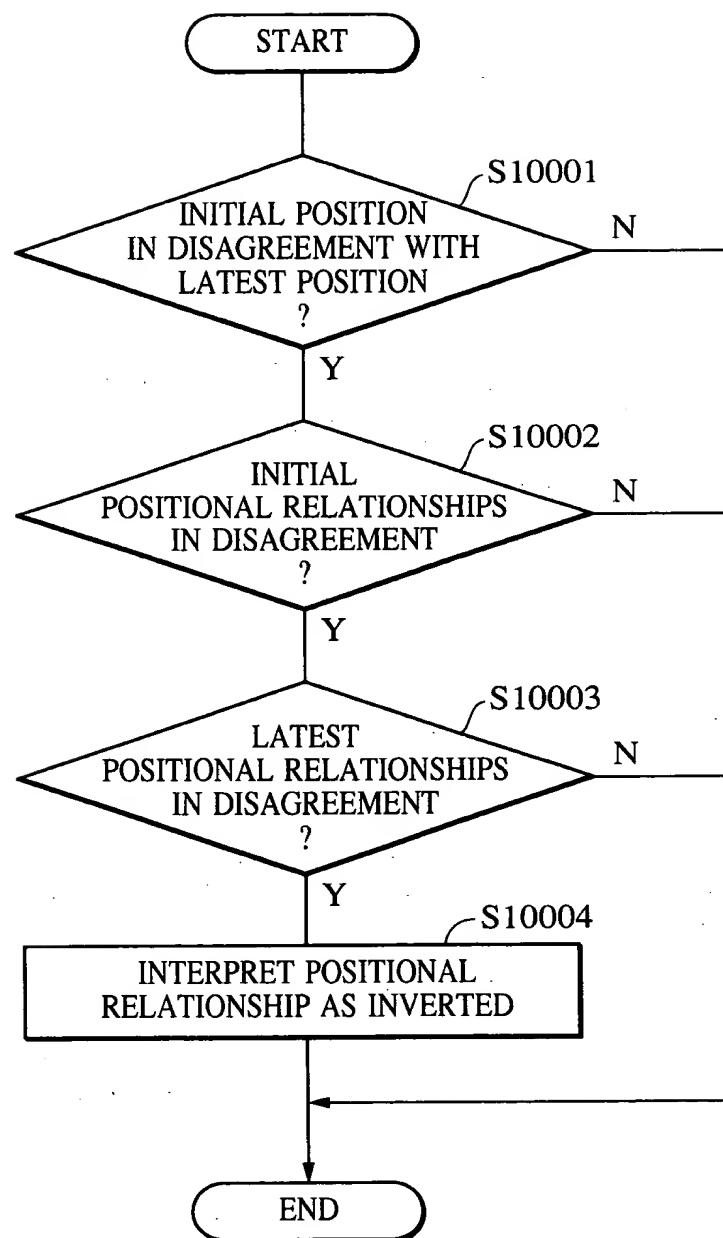


FIG. 100

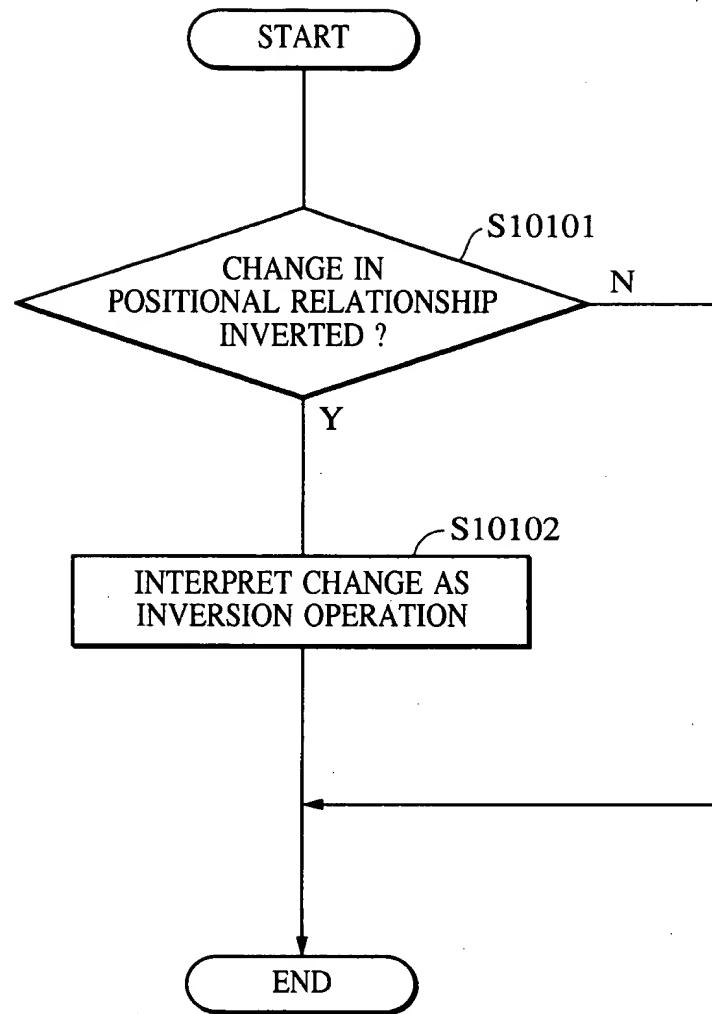
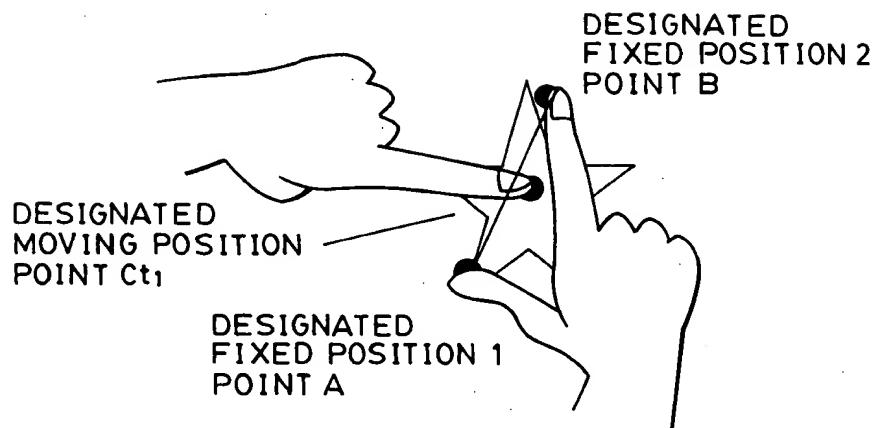


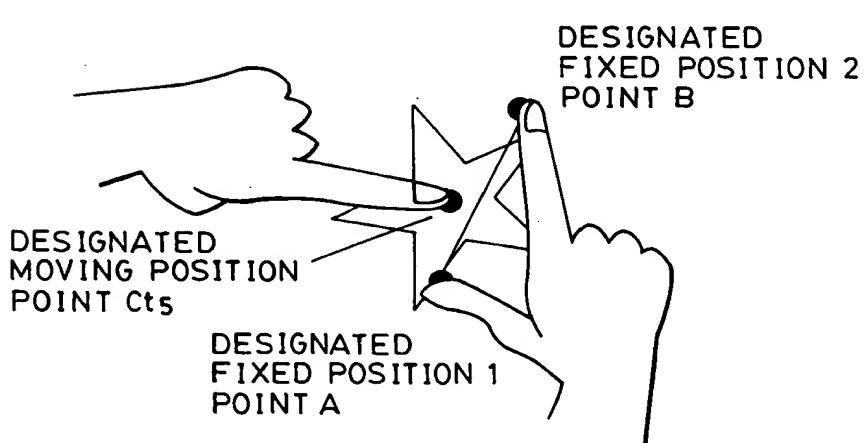
FIG. 101

SYMMETRICAL INVERSION



t_1

FIG. 102A



t_5

FIG. 102B

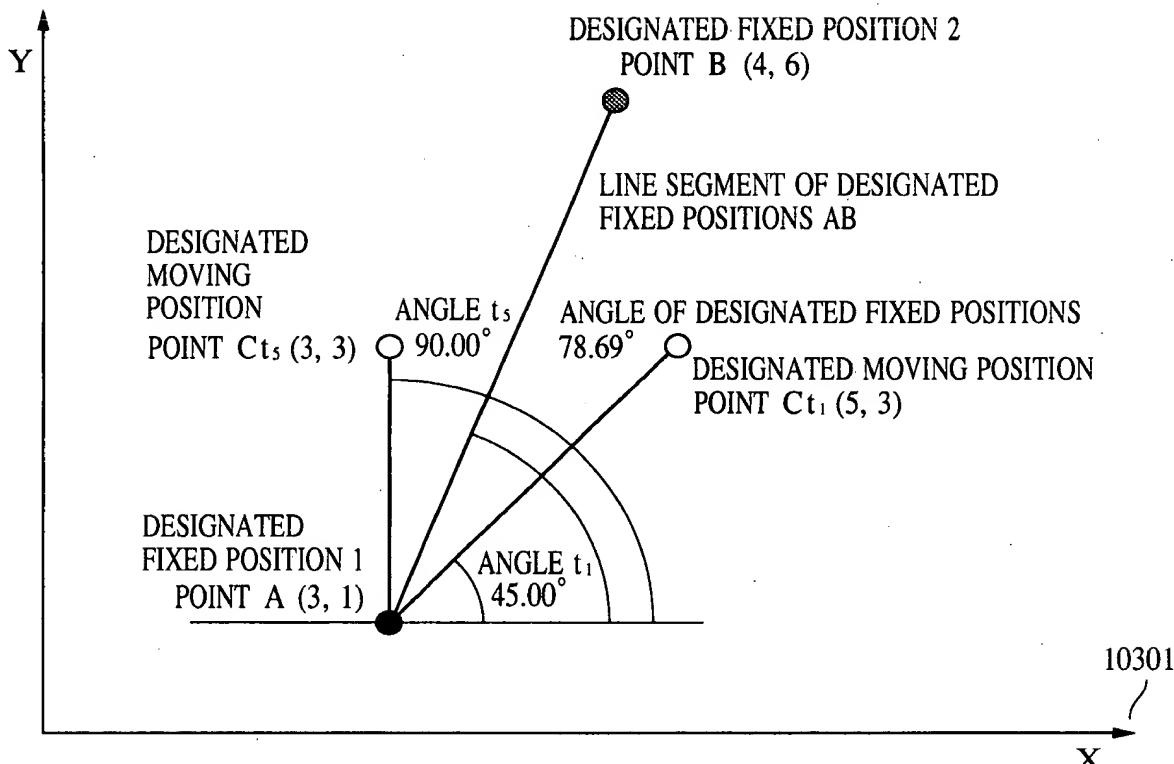


FIG. 103A

DESIGNATED FIXED POSITION POSITION DATA OF POINT A

	A_x	A_y
t_1	3.0	1.0
t_2	3.0	1.0
t_3	3.0	1.0
t_4	3.0	1.0
t_5	3.0	1.0

DESIGNATED FIXED POSITION POSITION DATA OF POINT B

	B_x	B_y
t_1	4.0	6.0
t_2	4.0	6.0
t_3	4.0	6.0
t_4	4.0	6.0
t_5	4.0	6.0

DESIGNATED MOVING POSITION POSITION DATA OF POINT C

	C_x	C_y
t_1	5.0	3.0
t_2	4.5	3.0
t_3	4.0	3.0
t_4	3.5	3.0
t_5	3.0	3.0

FIG. 103B

FIG. 103C

FIG. 103D

POSITIONAL RELATIONSHIP DATA OF TWO DESIGNATED FIXED POSITIONS AND DESIGNATED MOVING POSITION

	ANGLE OF FIXED POSITIONS	ANGLE OF MOVING POSITIONS
t_1	78.69	45.00
t_2	78.69	53.13
t_3	78.69	63.43
t_4	78.69	75.96
t_5	78.69	90.00

10303

FIG. 103E

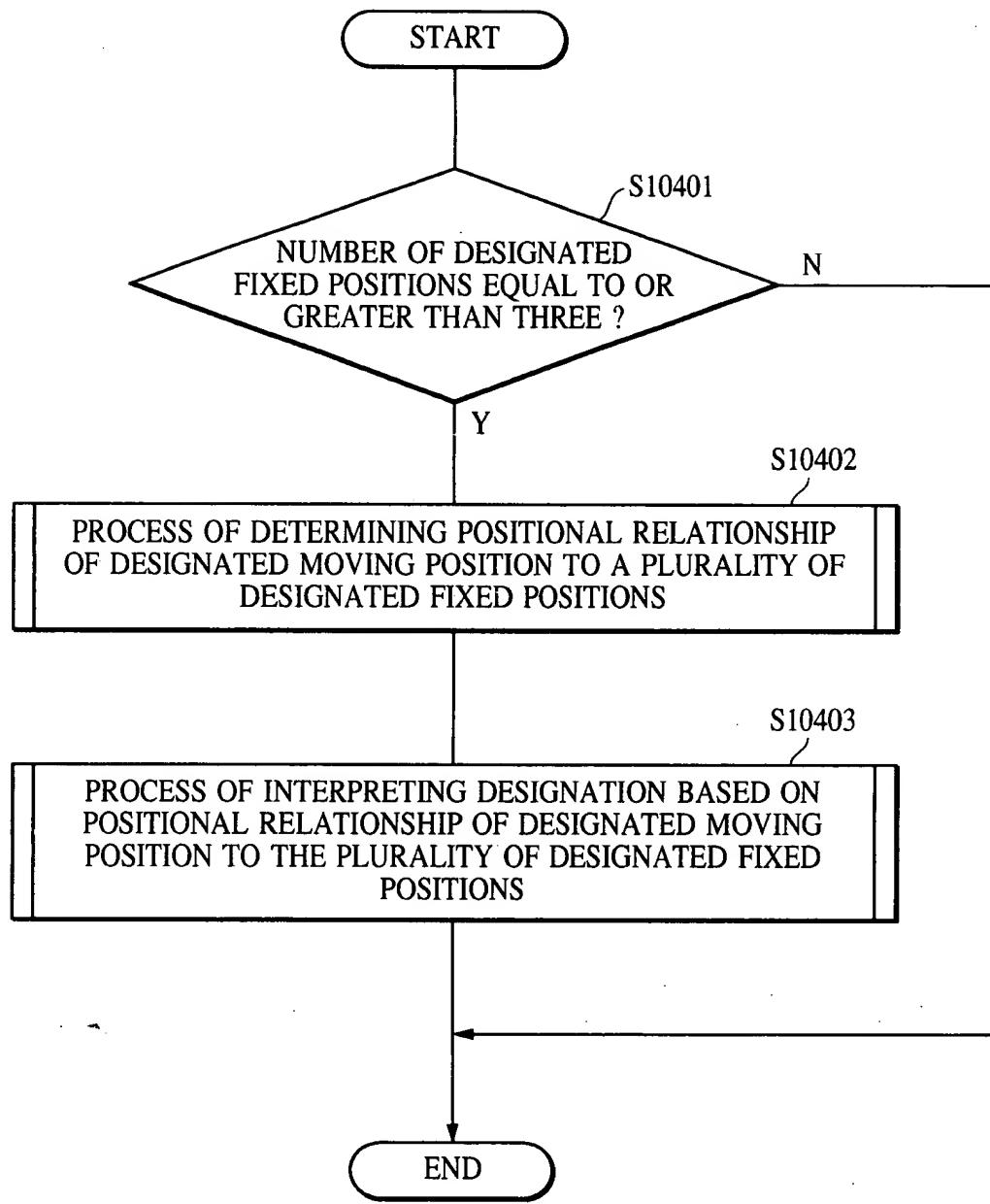


FIG. 104

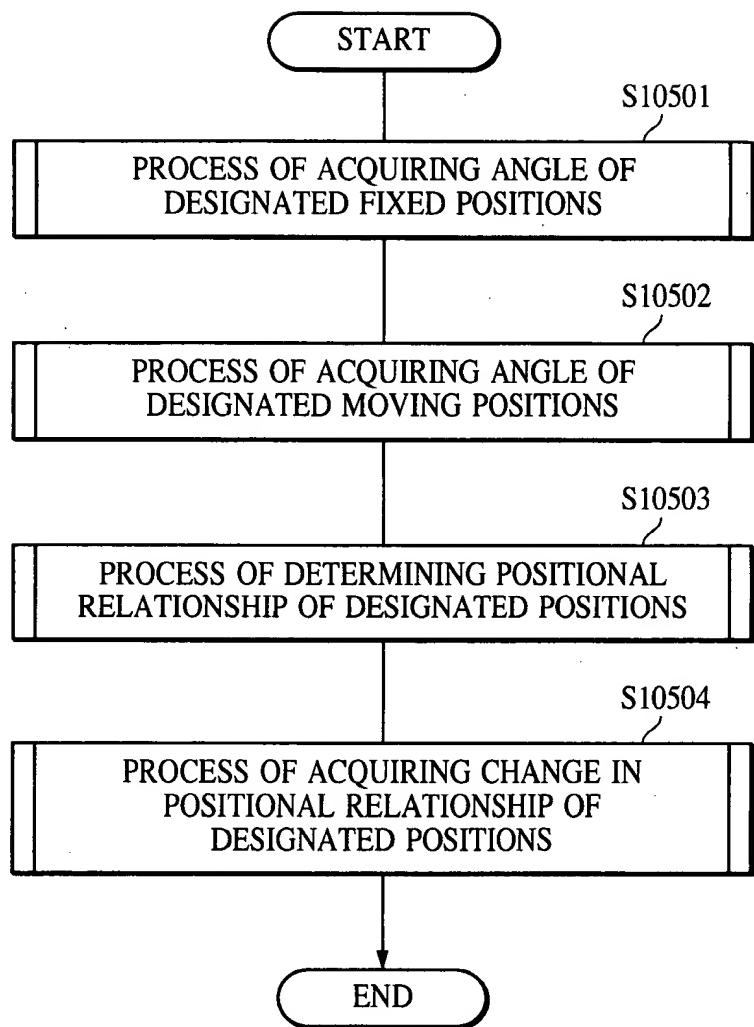


FIG. 105

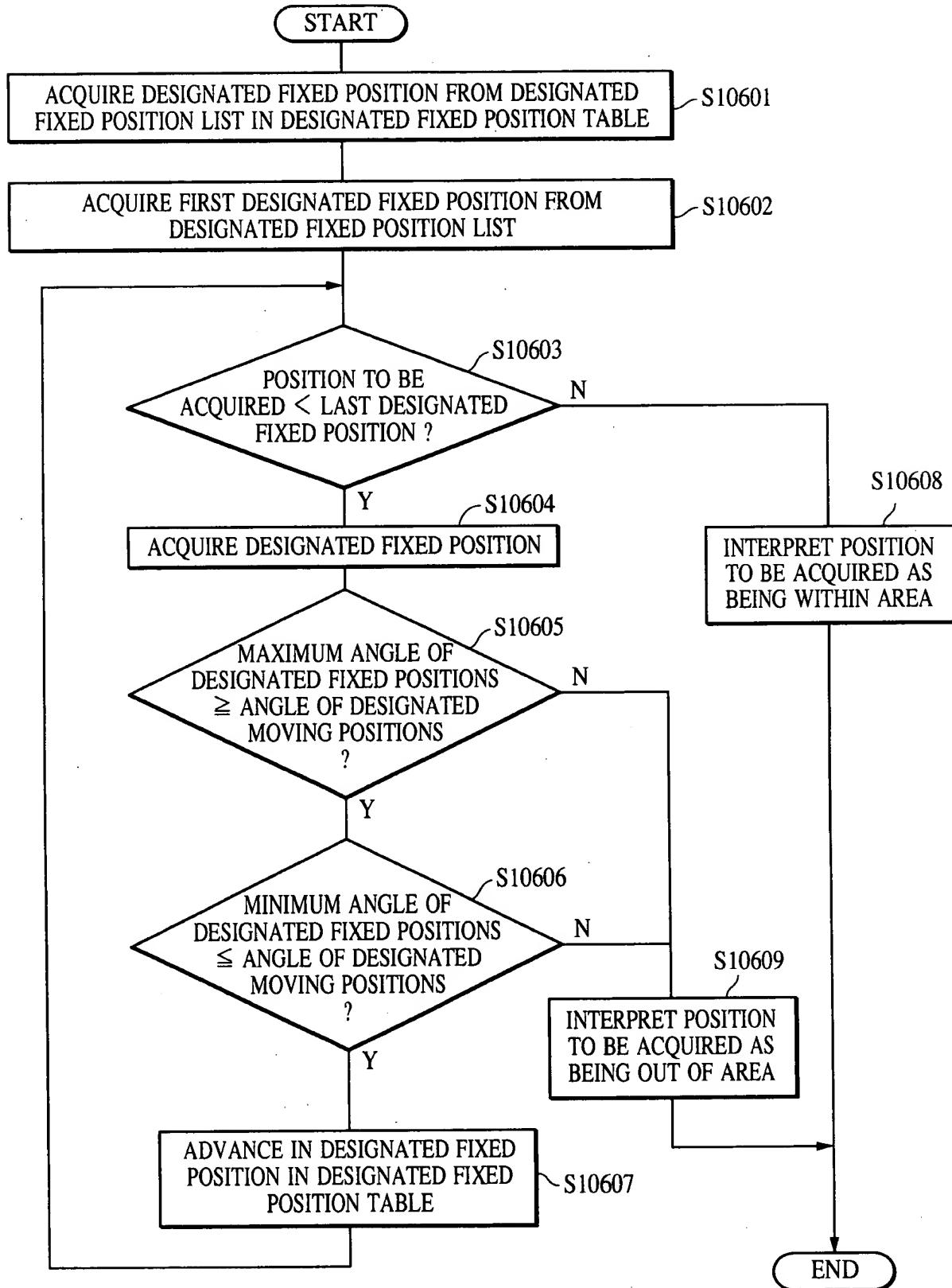


FIG. 106

WITHIN AREA

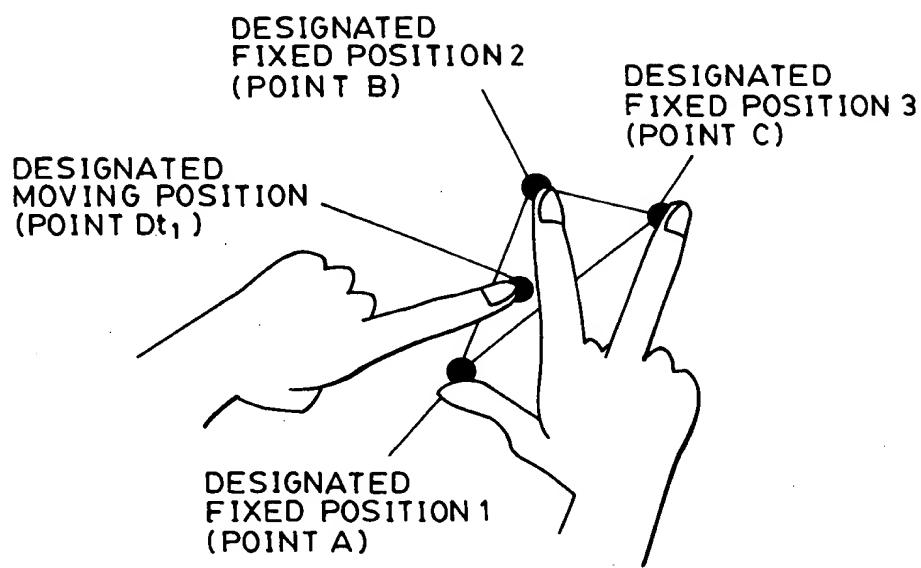


FIG. 107

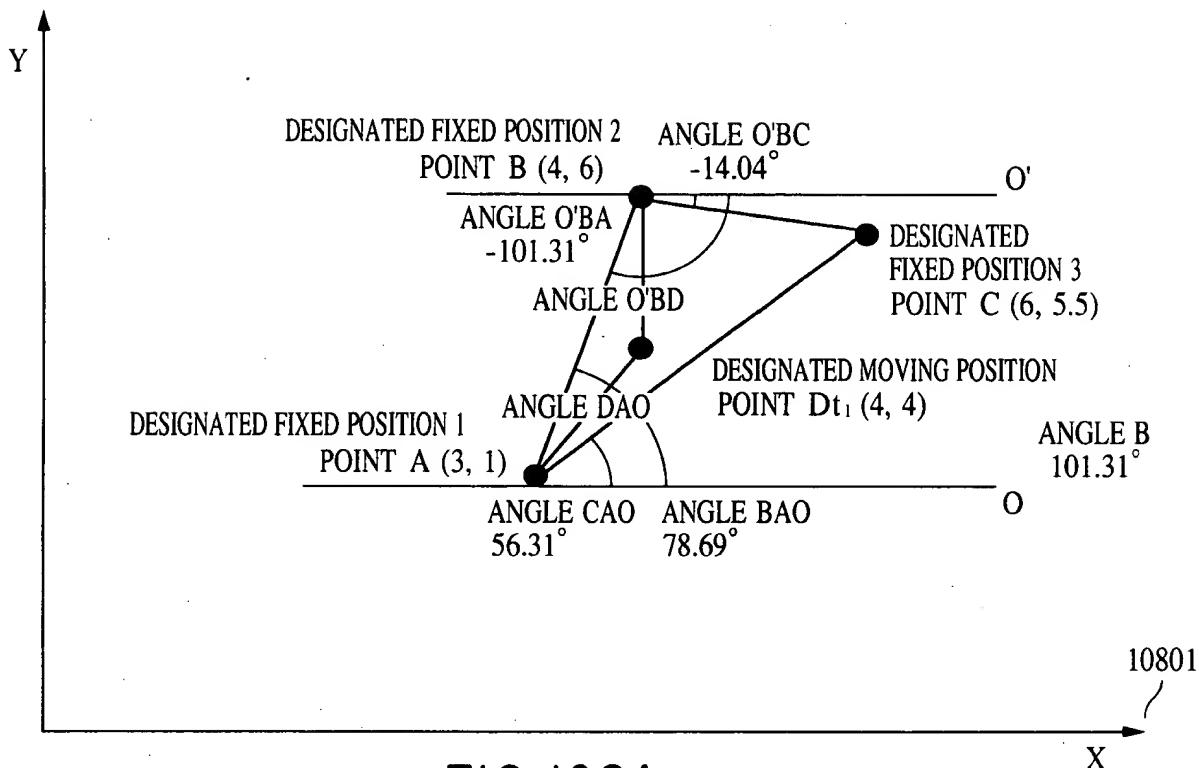


FIG. 108A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A_x	A_y
t_1	3.0	1.0

DESIGNATED FIXED POSITION
POSITION DATA OF POINT B

	B_x	B_y
t_1	4.0	6.0

DESIGNATED FIXED POSITION
POSITION DATA OF POINT C

	C_x	C_y
t_1	6.0	5.5

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D_x	D_y
t_1	4.0	4.0

10802

FIG. 108B

FIG. 108C

FIG. 108D

FIG. 108E

DATA OF CHANGE IN POSITIONAL RELATIONSHIP OF DESIGNATED FIXED POSITIONS

10803

	ANGLE BAO	ANGLE CAO	ANGLE DAO	ANGLE O'BA	ANGLE O'BC	ANGLE O'BD
t_1	78.69	56.31	71.57	-101.31	-14.04	-90.00

FIG. 108F

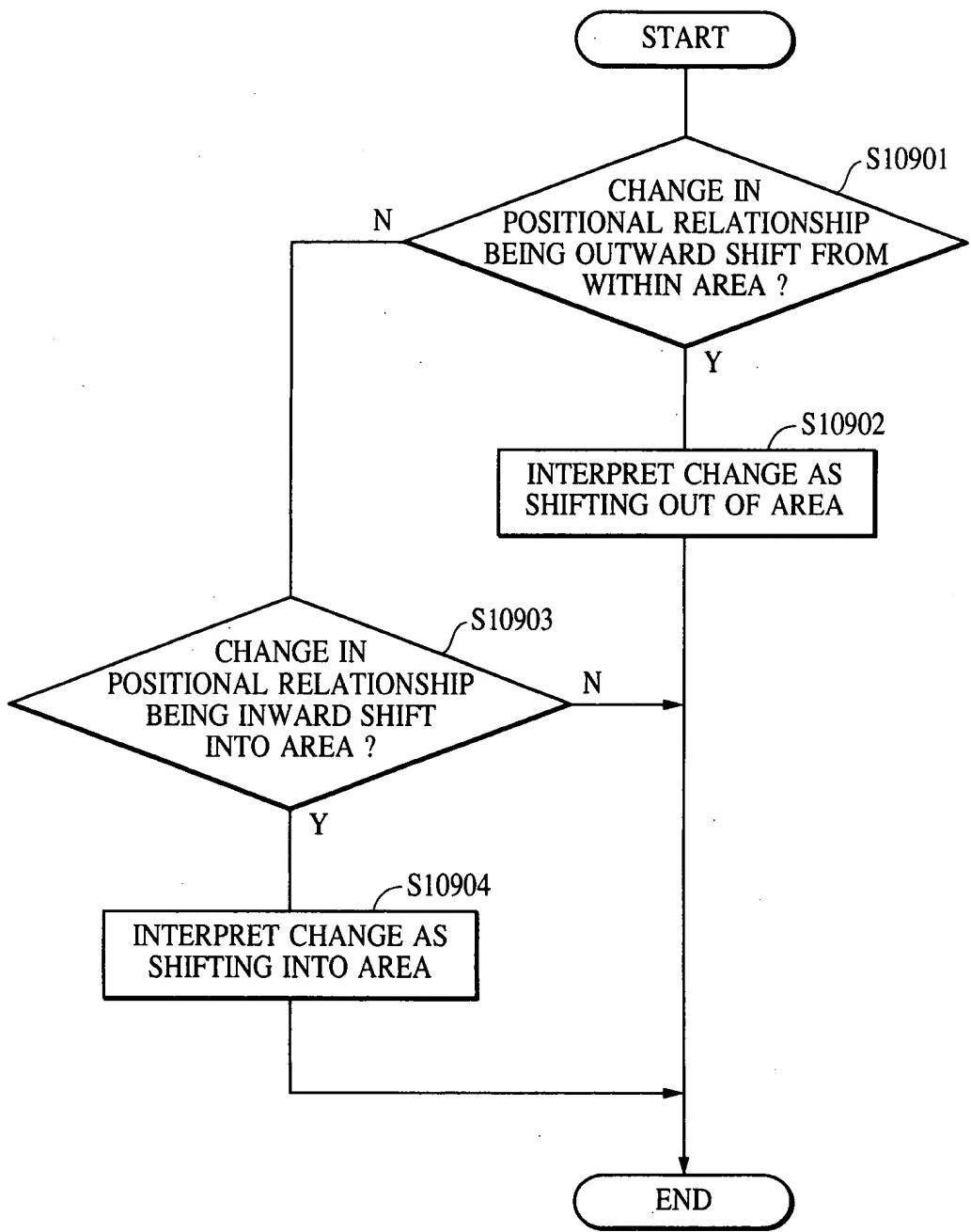


FIG. 109

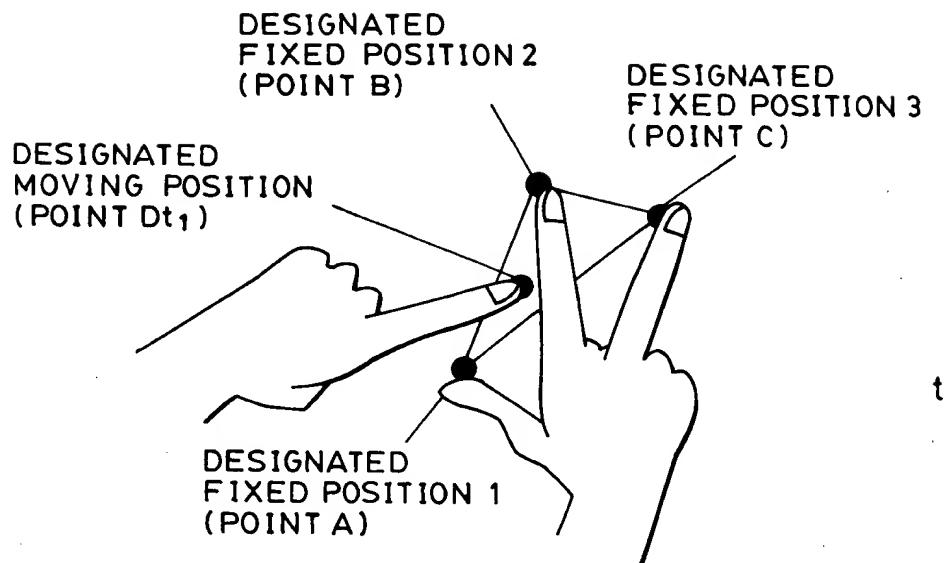


FIG. II OA

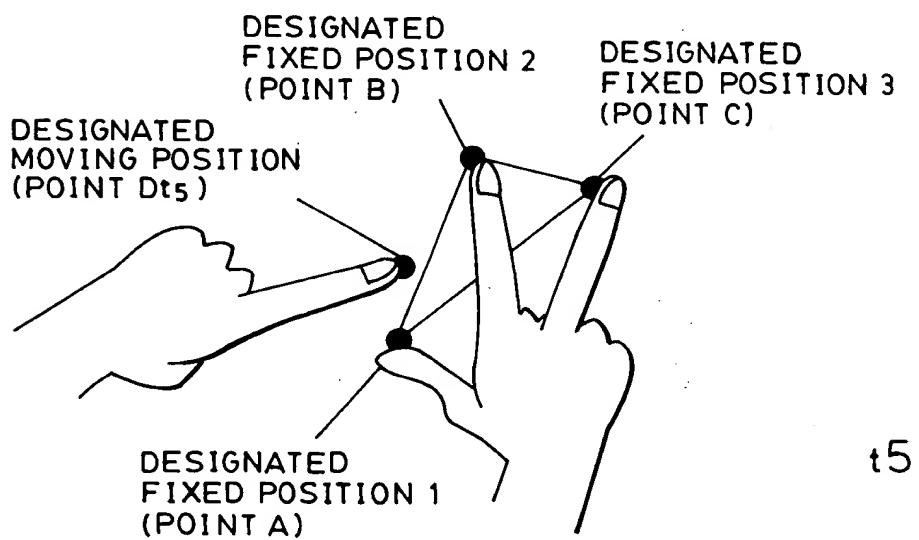


FIG. II OB

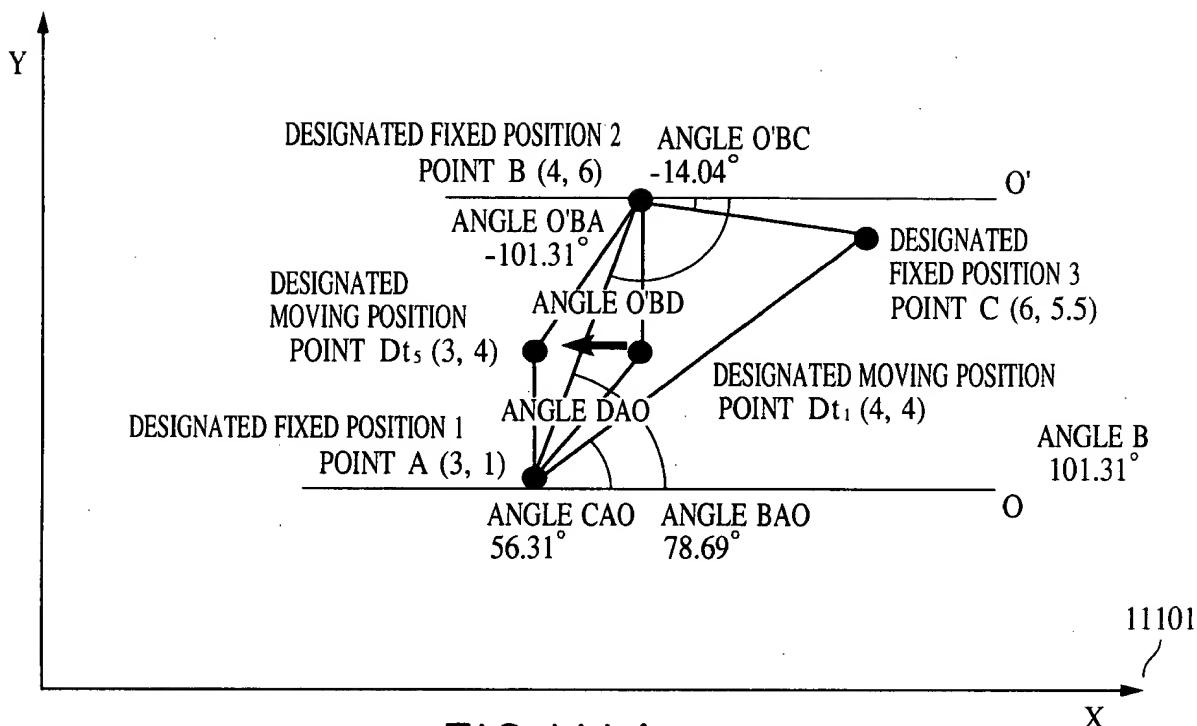


FIG. IIIA

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _X	A _Y
t ₁	3.0	1.0
t ₂	3.0	1.0
t ₃	3.0	1.0
t ₄	3.0	1.0
t ₅	3.0	1.0

DESIGNATED FIXED POSITION
POSITION DATA OF POINT B

	B _X	B _Y
t ₁	4.0	6.0
t ₂	4.0	6.0
t ₃	4.0	6.0
t ₄	4.0	6.0
t ₅	4.0	6.0

DESIGNATED FIXED POSITION
POSITION DATA OF POINT C

	C _X	C _Y
t ₁	6.0	5.5
t ₂	6.0	5.5
t ₃	6.0	5.5
t ₄	6.0	5.5
t ₅	6.0	5.5

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _X	D _Y
t ₁	4.0	4.0
t ₂	3.8	4.0
t ₃	3.6	4.0
t ₄	3.3	4.0
t ₅	3.0	4.0

FIG. IIIB

FIG. IIIC

FIG. IIID

FIG. IIIE

DATA OF CHANGE IN POSITIONAL RELATIONSHIP OF DESIGNATED FIXED POSITIONS

	ANGLE BAO	ANGLE CAO	ANGLE DAO	ANGLE O'BA	ANGLE O'BC	ANGLE O'BD
t ₁	78.69	56.31	71.57	-101.31	-14.04	-90.00
t ₂	78.69	56.31	57.07	-101.31	-14.04	-95.71
t ₃	78.69	56.31	78.69	-101.31	-14.04	-101.31
t ₄	78.69	56.31	84.29	-101.31	-14.04	-109.29
t ₅	78.69	56.31	90.00	-101.31	-14.04	-116.57

FIG. IIIF

11103

11101

11102

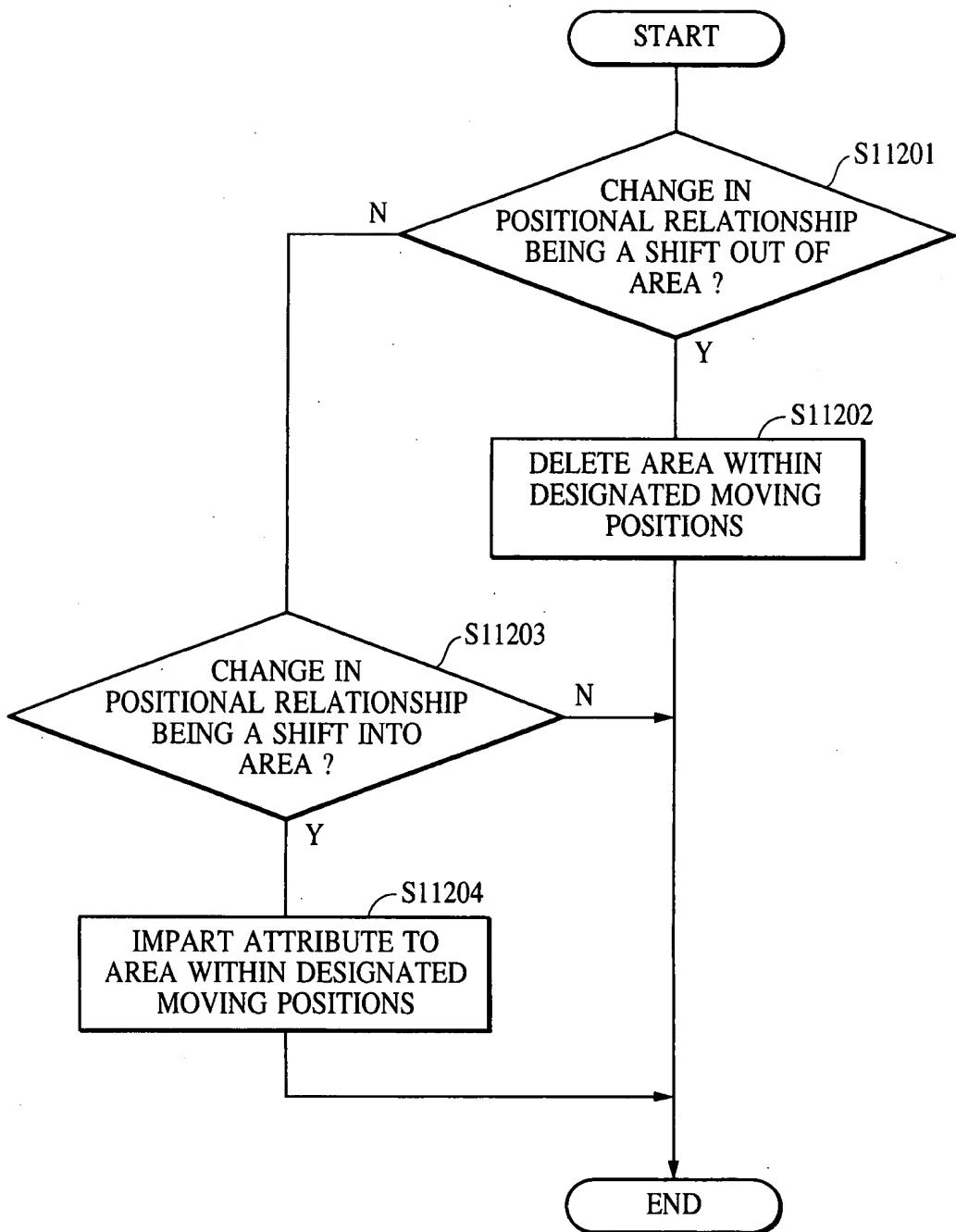


FIG. 112

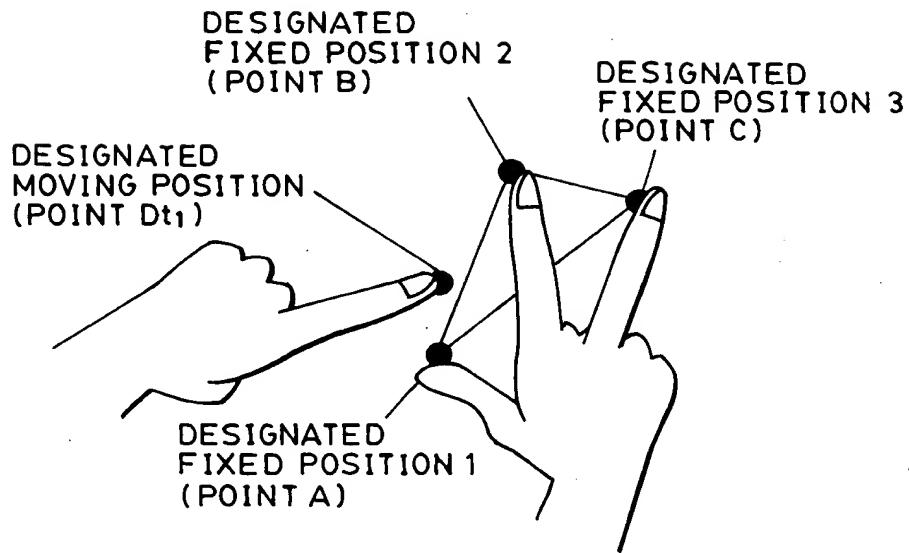


FIG. 113A

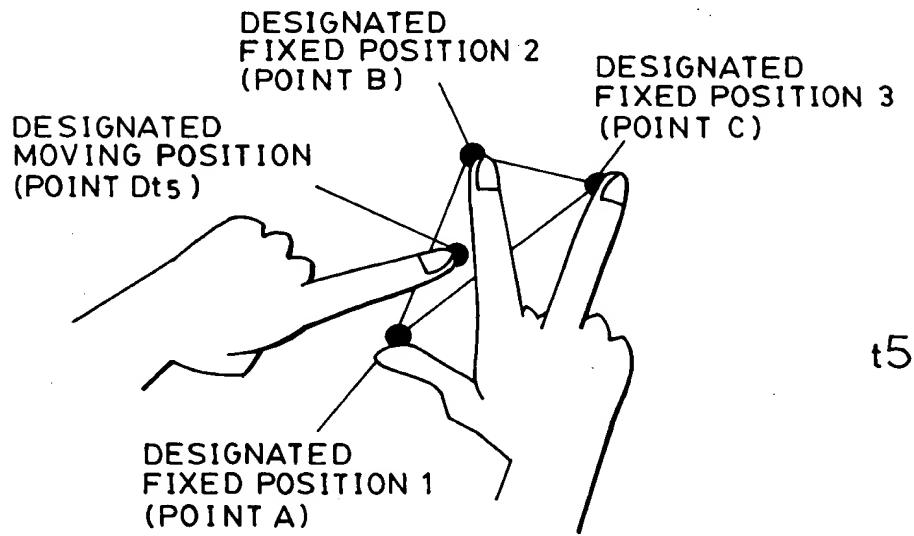


FIG. 113B

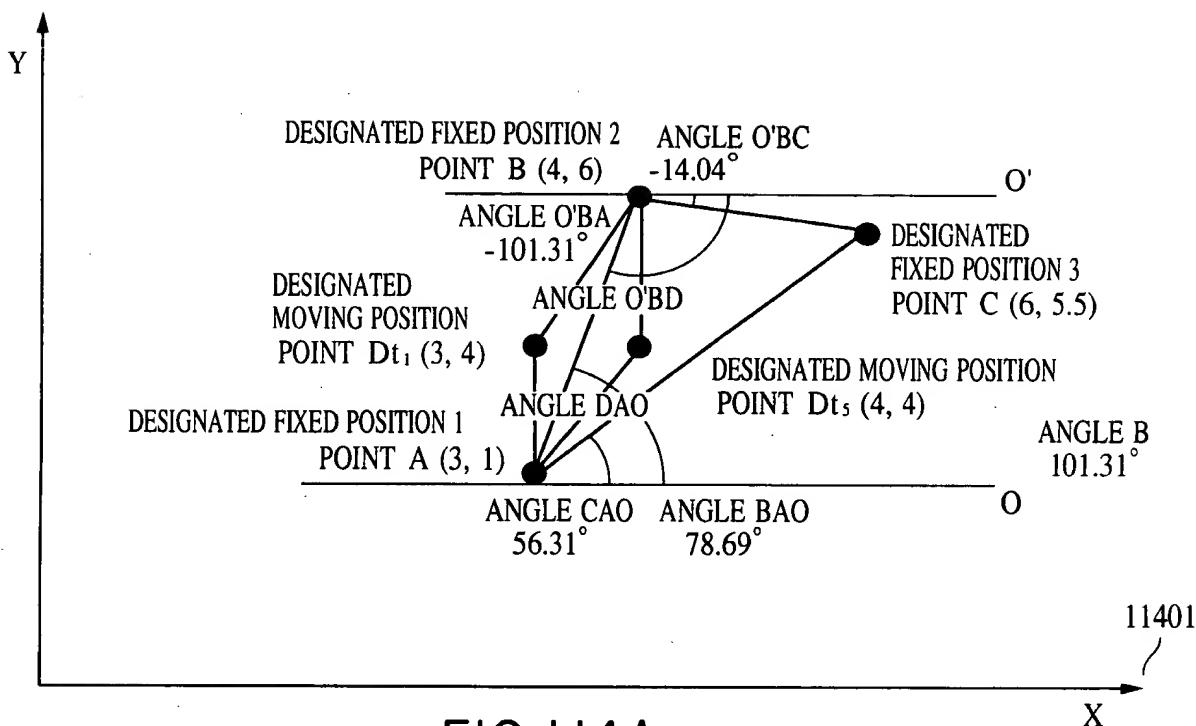


FIG. II4A

DESIGNATED FIXED POSITION
POSITION DATA OF POINT A

	A _x	A _y
t ₁	3.0	1.0
t ₂	3.0	1.0
t ₃	3.0	1.0
t ₄	3.0	1.0
t ₅	3.0	1.0

DESIGNATED FIXED POSITION
POSITION DATA OF POINT B

	B _x	B _y
t ₁	4.0	6.0
t ₂	4.0	6.0
t ₃	4.0	6.0
t ₄	4.0	6.0
t ₅	4.0	6.0

DESIGNATED FIXED POSITION
POSITION DATA OF POINT C

	C _x	C _y
t ₁	6.0	5.5
t ₂	6.0	5.5
t ₃	6.0	5.5
t ₄	6.0	5.5
t ₅	6.0	5.5

DESIGNATED MOVING POSITION
POSITION DATA OF POINT D

	D _x	D _y
t ₁	3.0	4.0
t ₂	3.3	4.0
t ₃	3.6	4.0
t ₄	3.8	4.0
t ₅	4.0	4.0

11401

11402

11403

FIG. II4B

FIG. II4C

FIG. II4D

FIG. II4E

DATA OF CHANGE IN POSITIONAL RELATIONSHIP

	ANGLE BAO	ANGLE CAO	ANGLE DAO	ANGLE O'BA	ANGLE O'BC	ANGLE O'BD
t ₁	78.69	56.31	90.00	-101.31	-14.04	-116.57
t ₂	78.69	56.31	84.29	-101.31	-14.04	-109.29
t ₃	78.69	56.31	78.69	-101.31	-14.04	-101.31
t ₄	78.69	56.31	75.07	-101.31	-14.04	-95.71
t ₅	78.69	56.31	71.57	-101.31	-14.04	-90.00

FIG. II4F

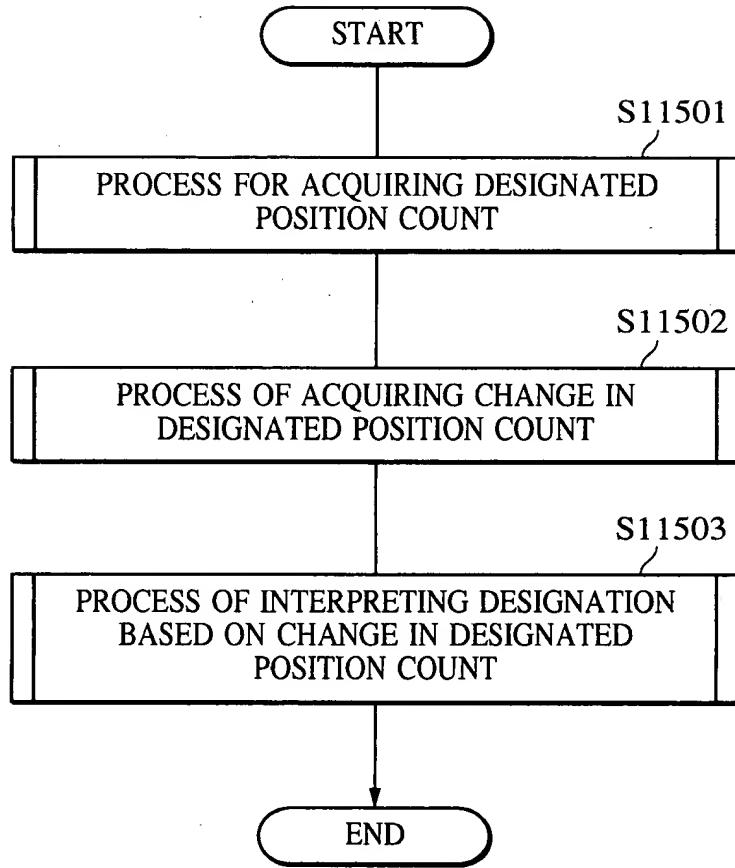


FIG. 115

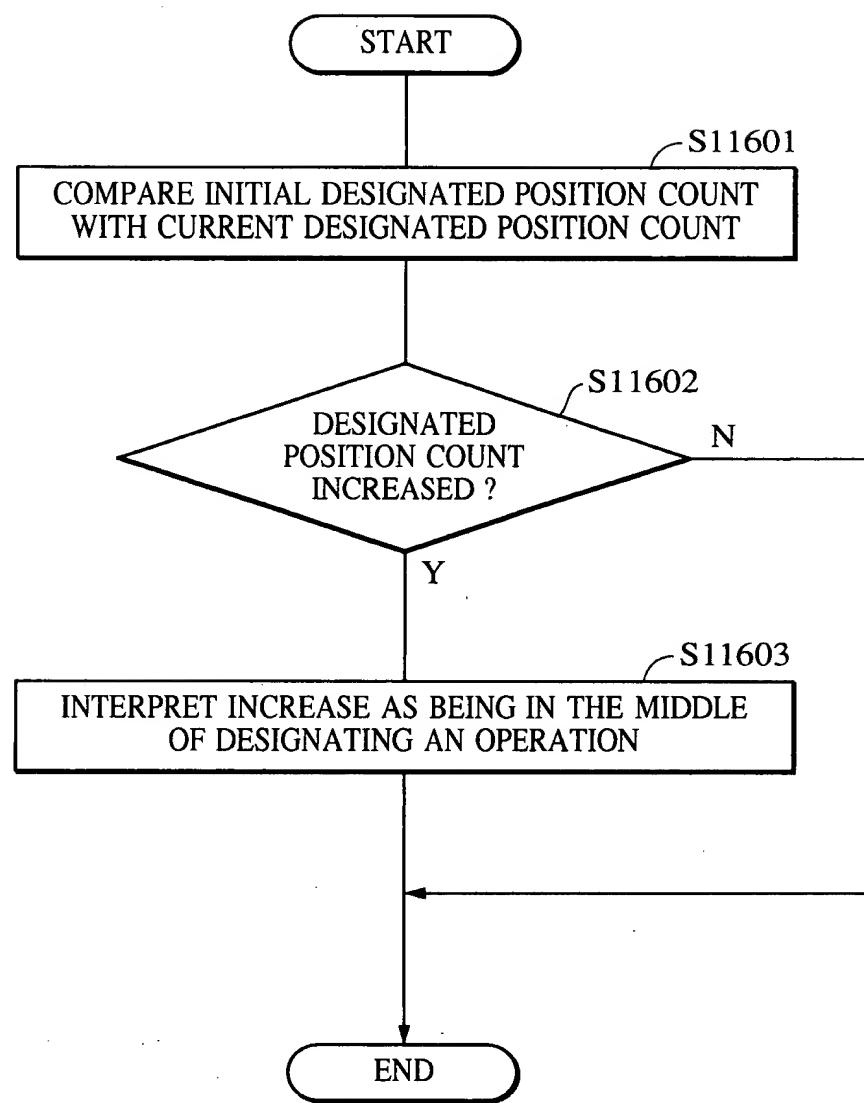


FIG.116

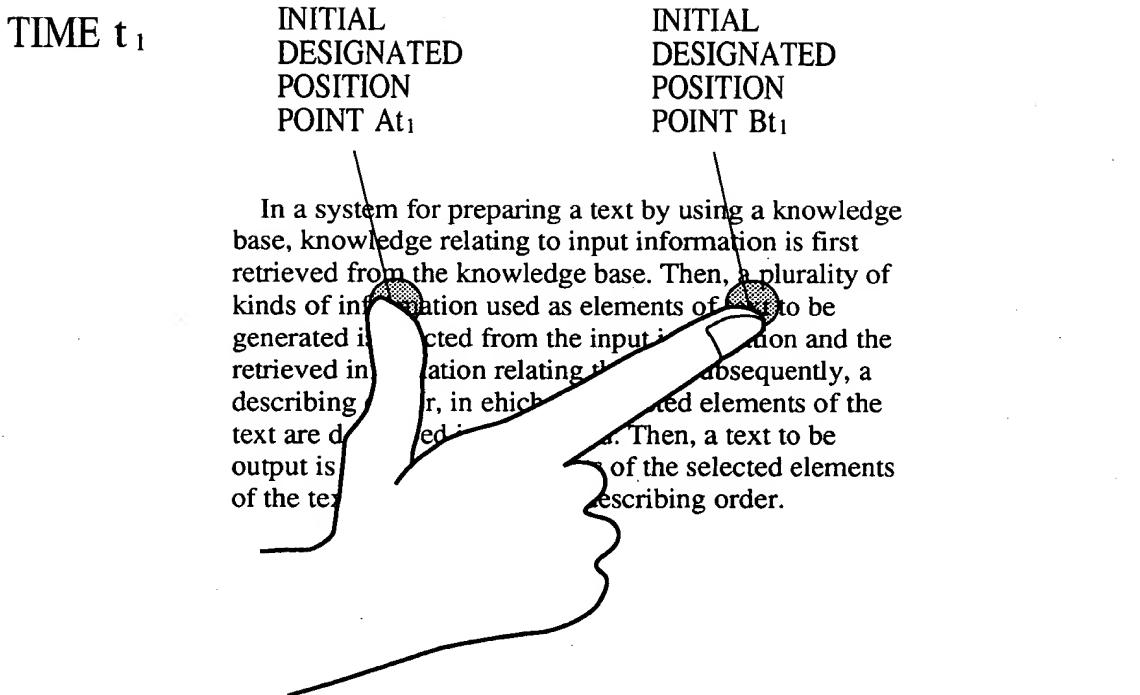


FIG. 117A

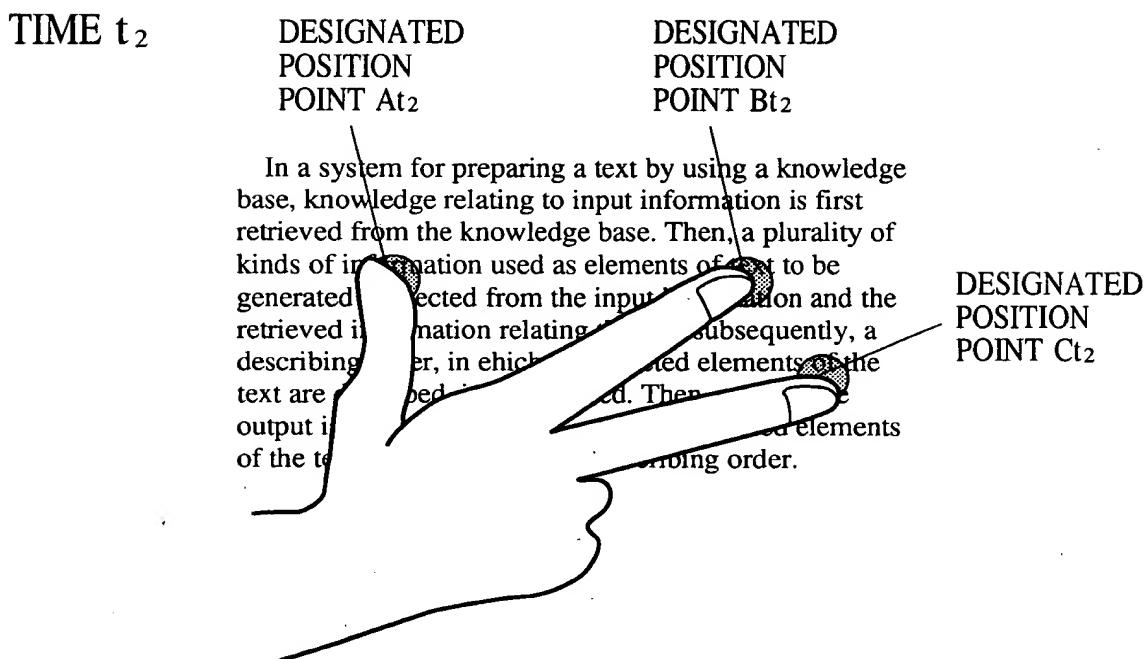


FIG. 117B

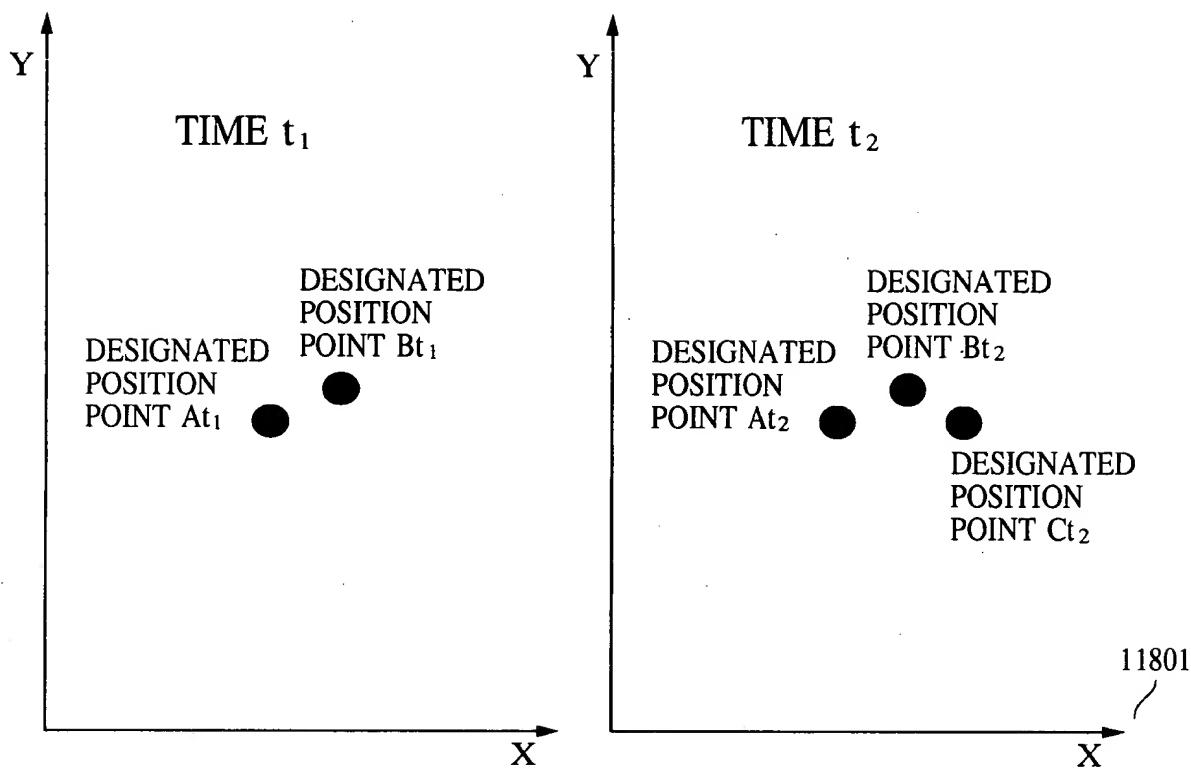


FIG. 118A

FIG. 118B

DESIGNATED
FIXED POSITION
POSITION DATA
OF POINT A

	A_x	A_y
t_1	3.0	3.0
t_2	3.0	3.0
t_3	3.0	3.0

FIG. 118C

DESIGNATED
FIXED POSITION
POSITION DATA
OF POINT B

	B_x	B_y
t_1	4.0	4.0
t_2	4.0	4.0
t_3	4.0	4.0

FIG. 118D

DESIGNATED
FIXED POSITION
POSITION DATA
OF POINT C

	C_x	C_y
t_1		
t_2	5.0	3.0
t_3	5.0	3.0

FIG. 118E

DATA OF DESIGNATED POSITION COUNT

	DESIGNATED POSITION COUNT	CHANGE IN INITIAL DESIGNATED POSITION COUNT
t_1	2	0
t_2	3	1
t_3	3	1

11803

FIG. 118F

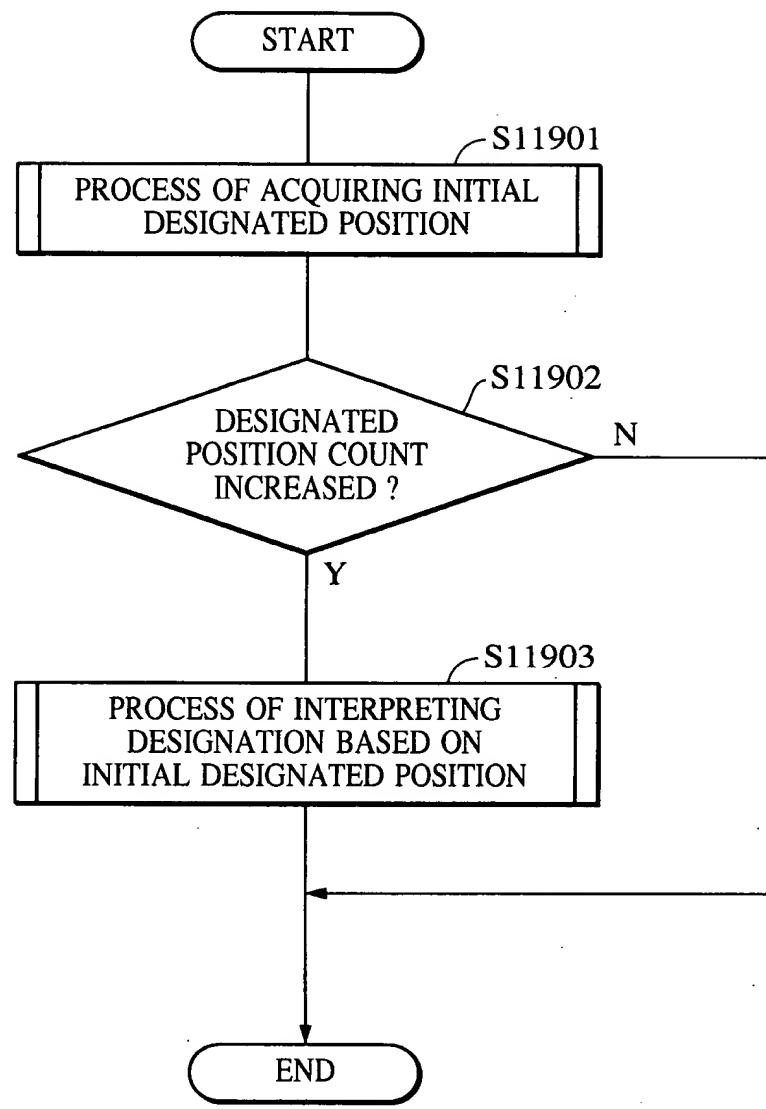


FIG.119

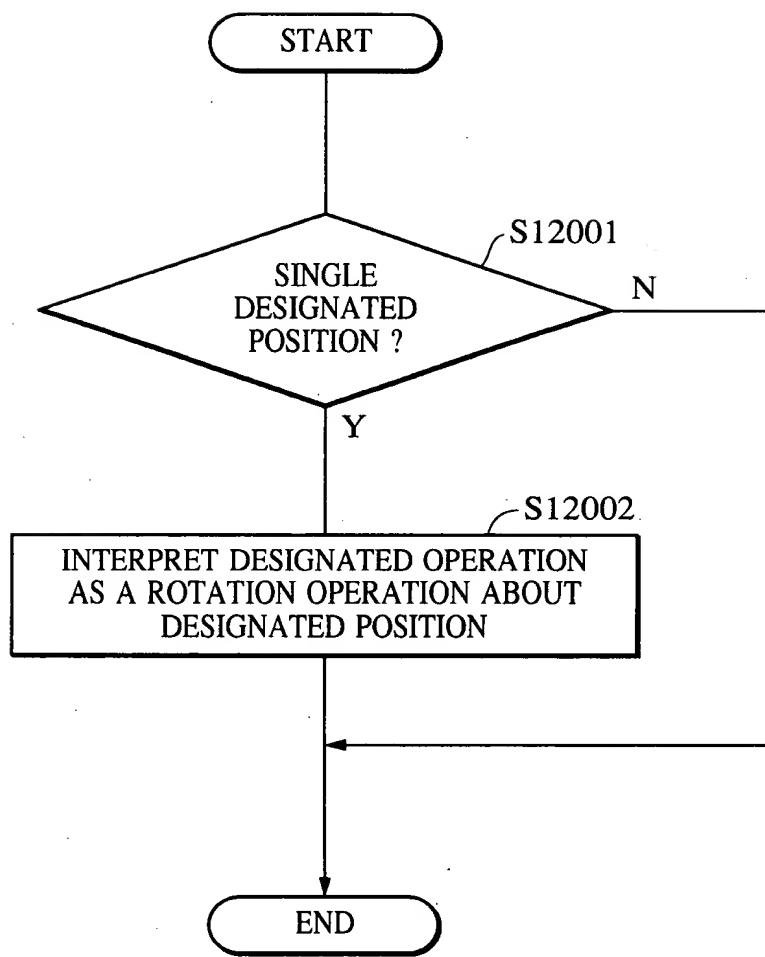


FIG. I20

TIME t_1

INITIAL
DESIGNATED
POSITION
POINT A(3,3)

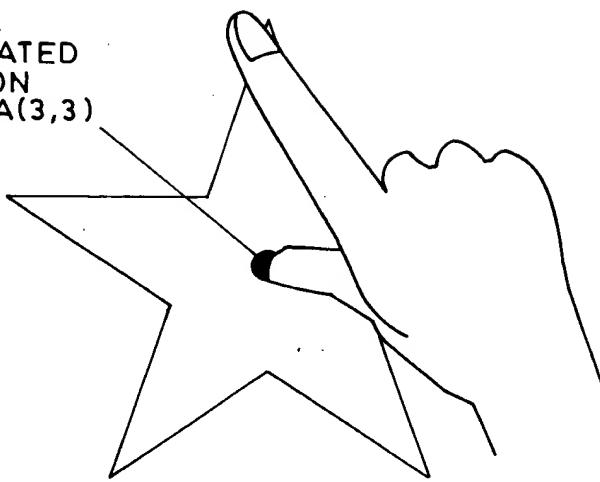


FIG. 121A

TIME t_5

DESIGNATED
POSITION
POINT B_{t3}

DESIGNATED
POSITION
POINT B_{t5}

DESIGNATED
POSITION
POINT A(3,3)

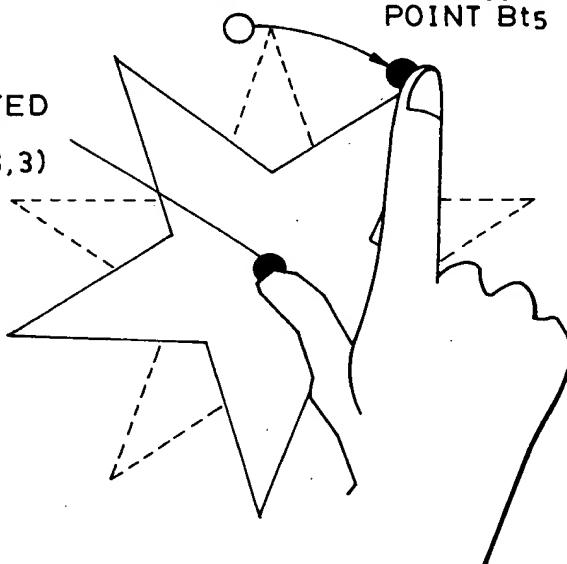


FIG. 121B

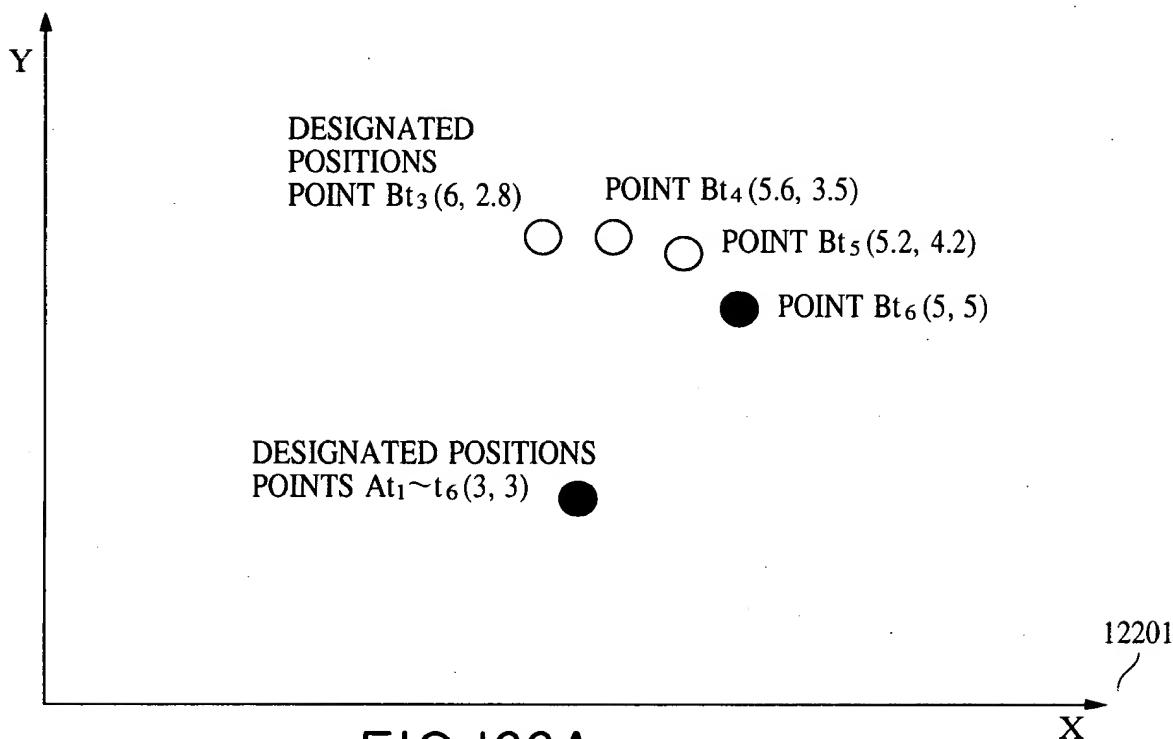


FIG. I22A

DESIGNATED POSITION
POSITION DATA OF POINT A

	A _x	A _y
t ₁	3.0	3.0
t ₂	3.0	3.0
t ₃	3.0	3.0
t ₄	3.0	3.0
t ₅	3.0	3.0
t ₆	3.0	3.0

DESIGNATED POSITION
POSITION DATA OF POINT B

	B _x	B _y
t ₁		
t ₂		
t ₃	6.0	2.8
t ₄	5.6	3.5
t ₅	5.2	4.2
t ₆	5.0	5.0

FIG. I22B

DATA OF DESIGNATED POSITION COUNT

	DESIGNATED POSITION COUNT	CHANGE IN INITIAL DESIGNATED POSITION COUNT
t ₁	1	0
t ₂	1	0
t ₃	2	1
t ₄	2	1
t ₅	2	1
t ₆	2	1

12203

FIG. I22D

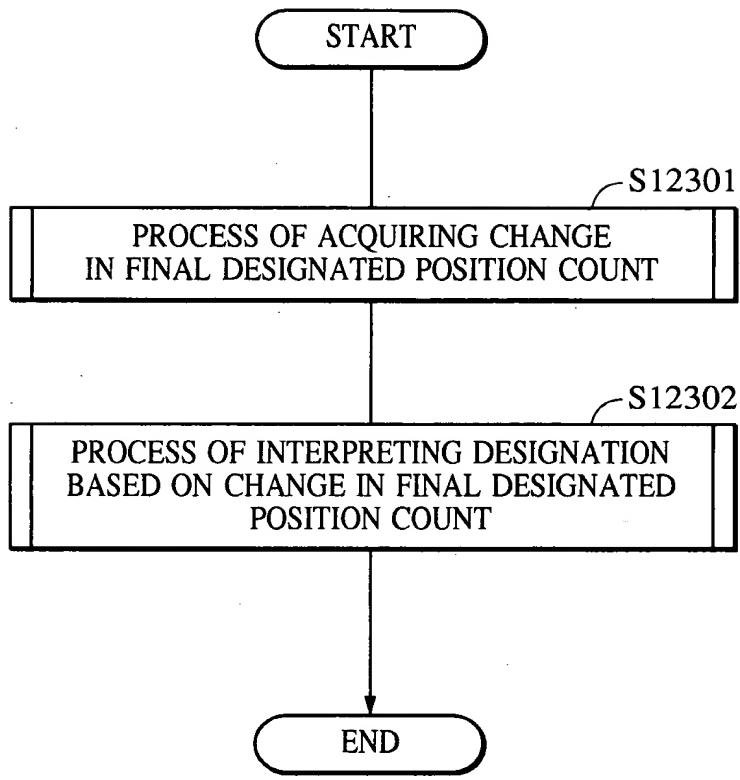


FIG.123

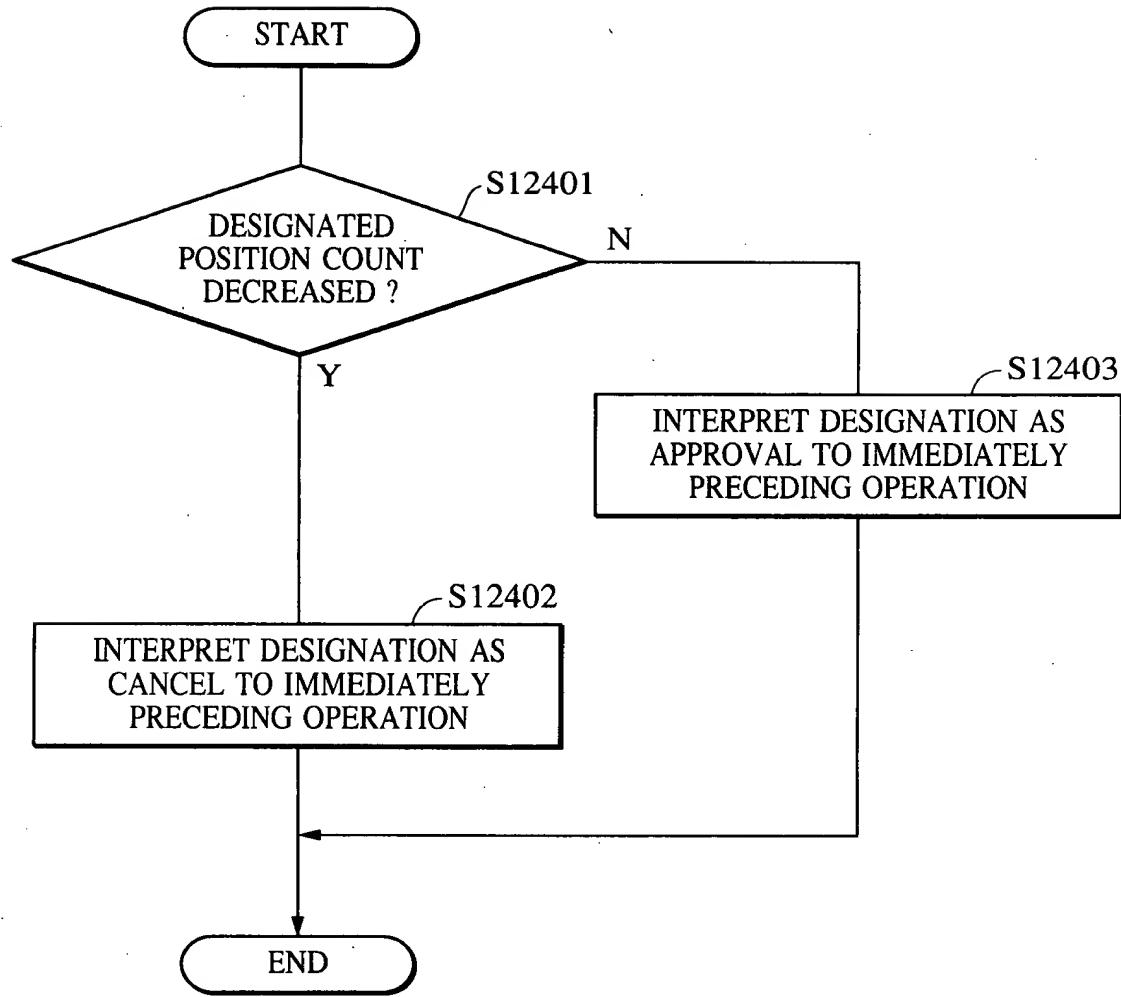


FIG. I24

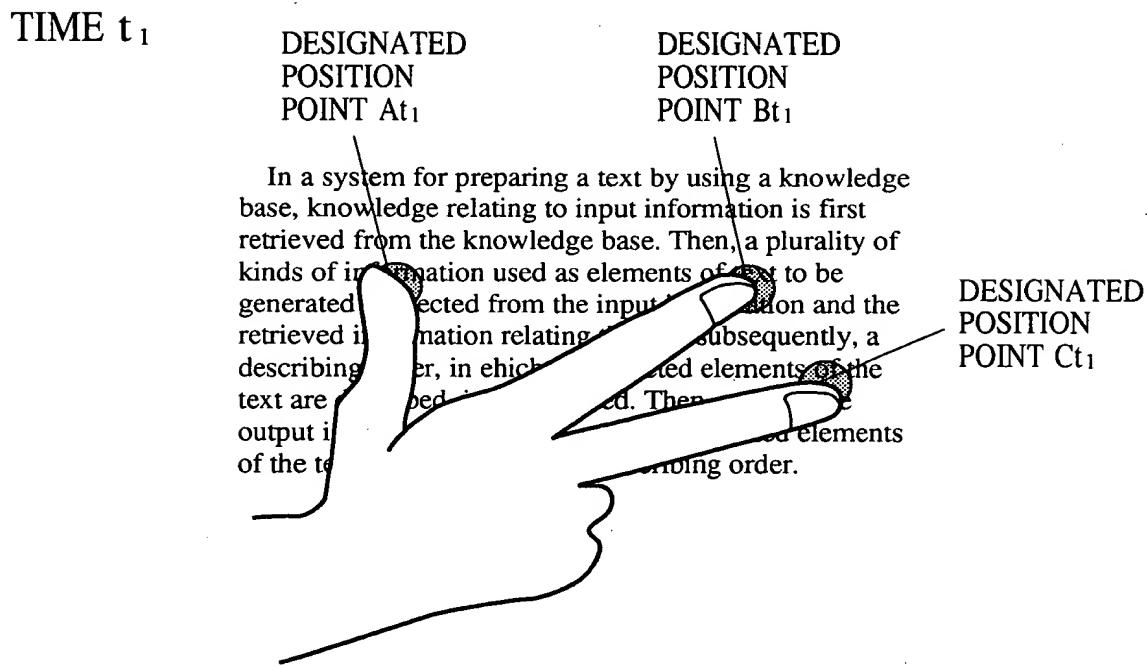


FIG. 125A

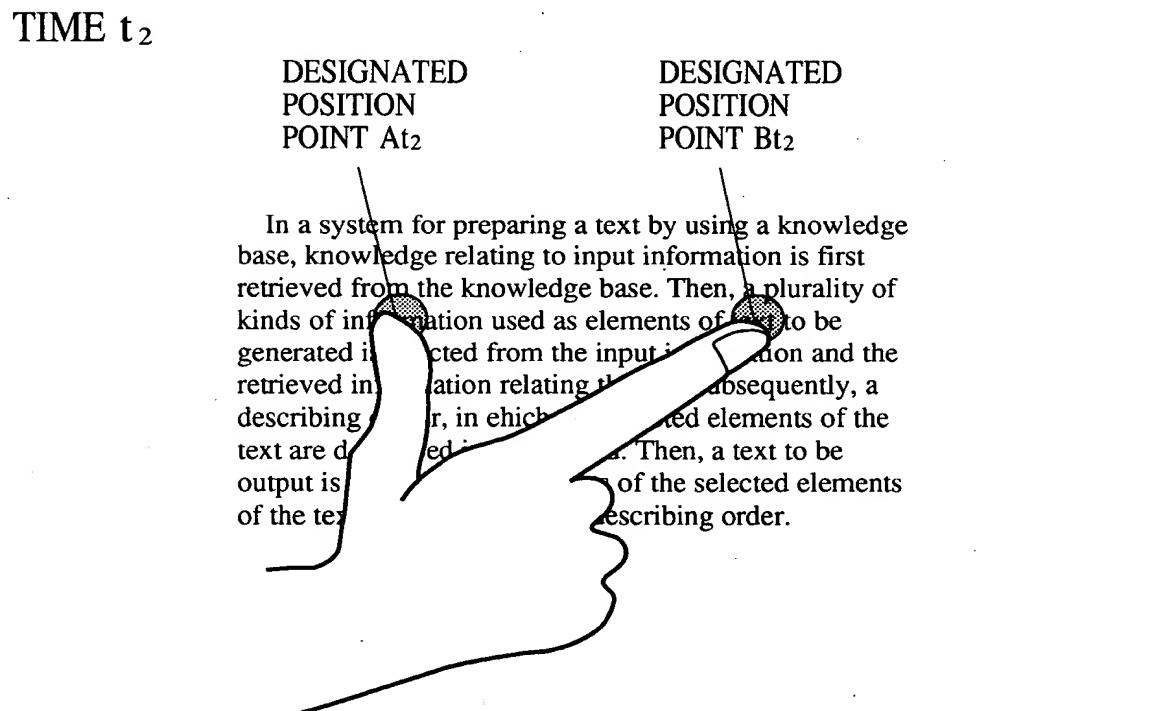


FIG. 125B

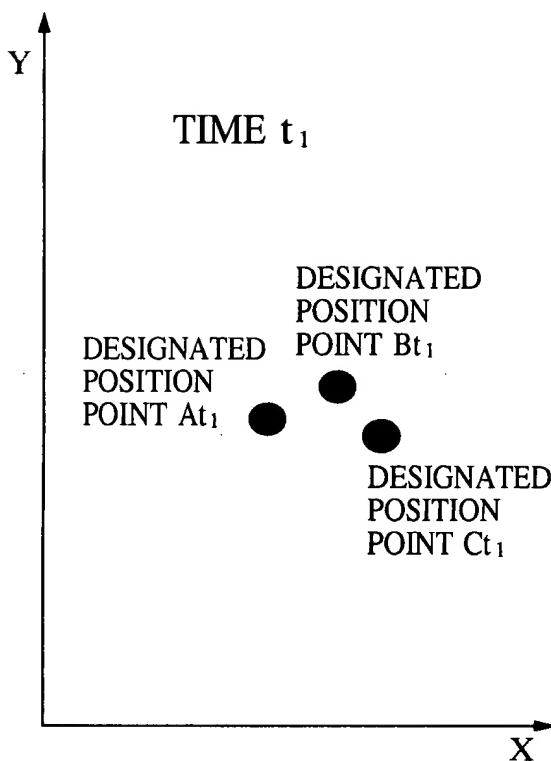


FIG. I26A

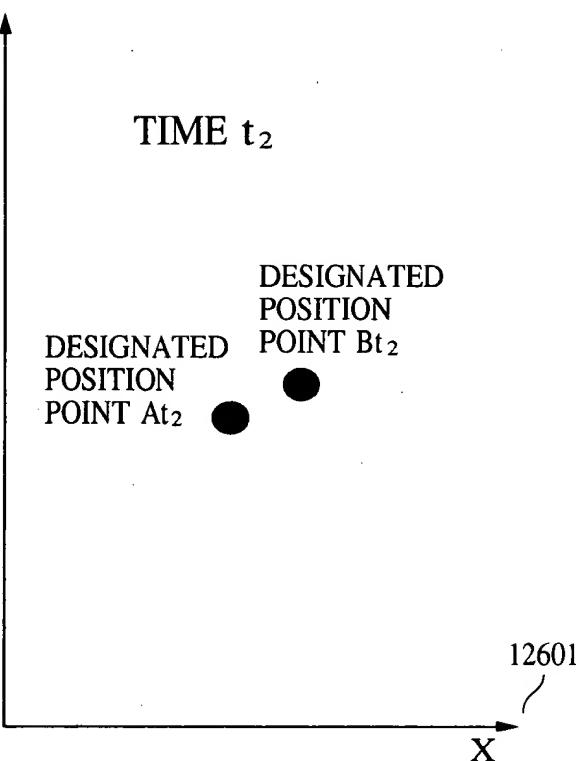


FIG. I26B

DESIGNATED POSITION
POSITION DATA OF
POINT A

	A_x	A_y
t_1	3.0	3.0
t_2	3.0	3.0

FIG. I26C

DESIGNATED POSITION
POSITION DATA OF
POINT B

	B_x	B_y
t_1	4.0	4.0
t_2	4.0	4.0

FIG. I26D

DESIGNATED POSITION
POSITION DATA OF
POINT C

	C_x	C_y
t_1	5.0	3.0
t_2		

FIG. I26E

DATA OF DESIGNATED POSITION COUNT

	DESIGNATED POSITION COUNT	CHANGE IN INITIAL DESIGNATED POSITION COUNT
t_1	3	0
t_2	2	-1

12603

FIG. I26F

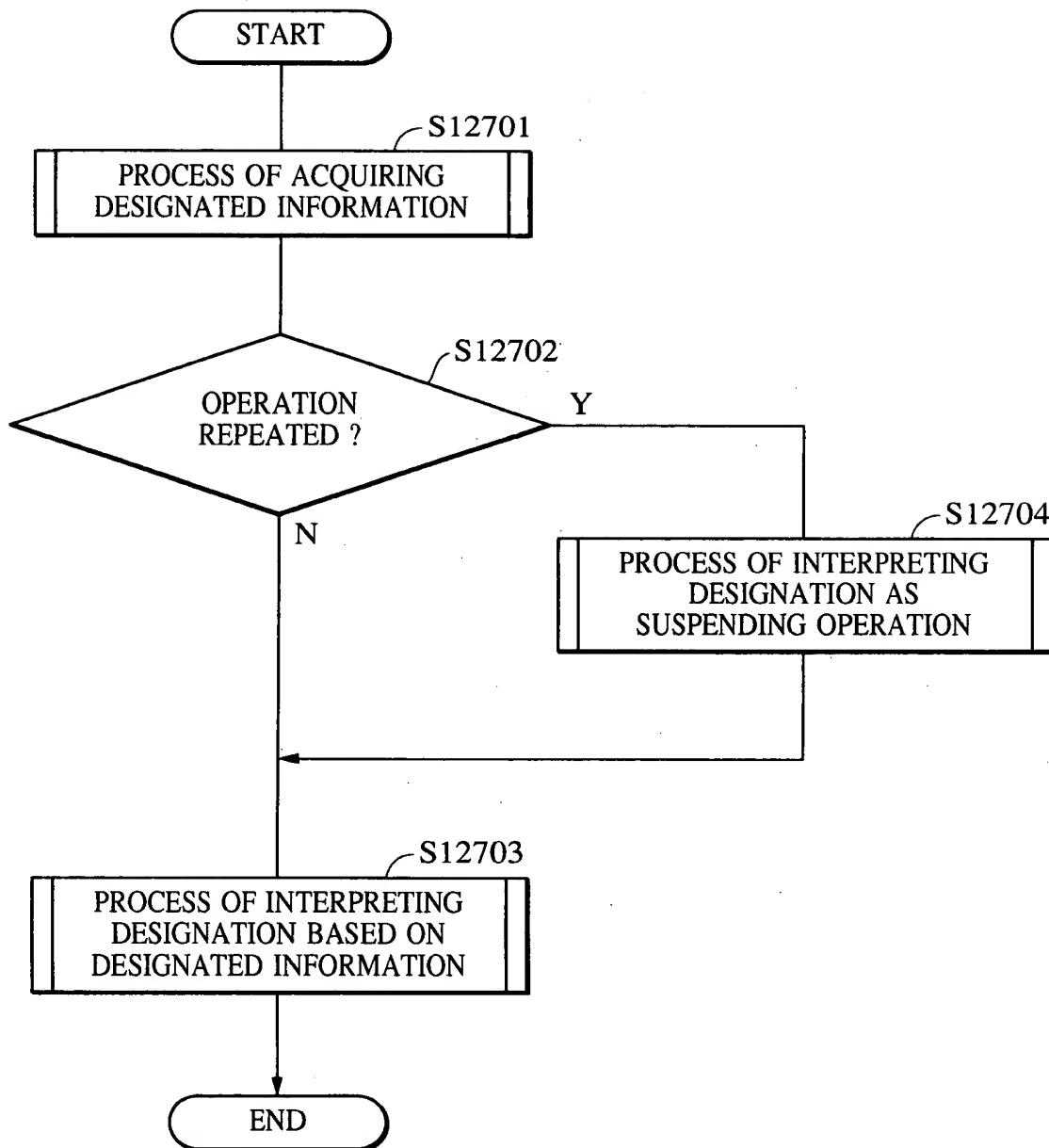


FIG. 127

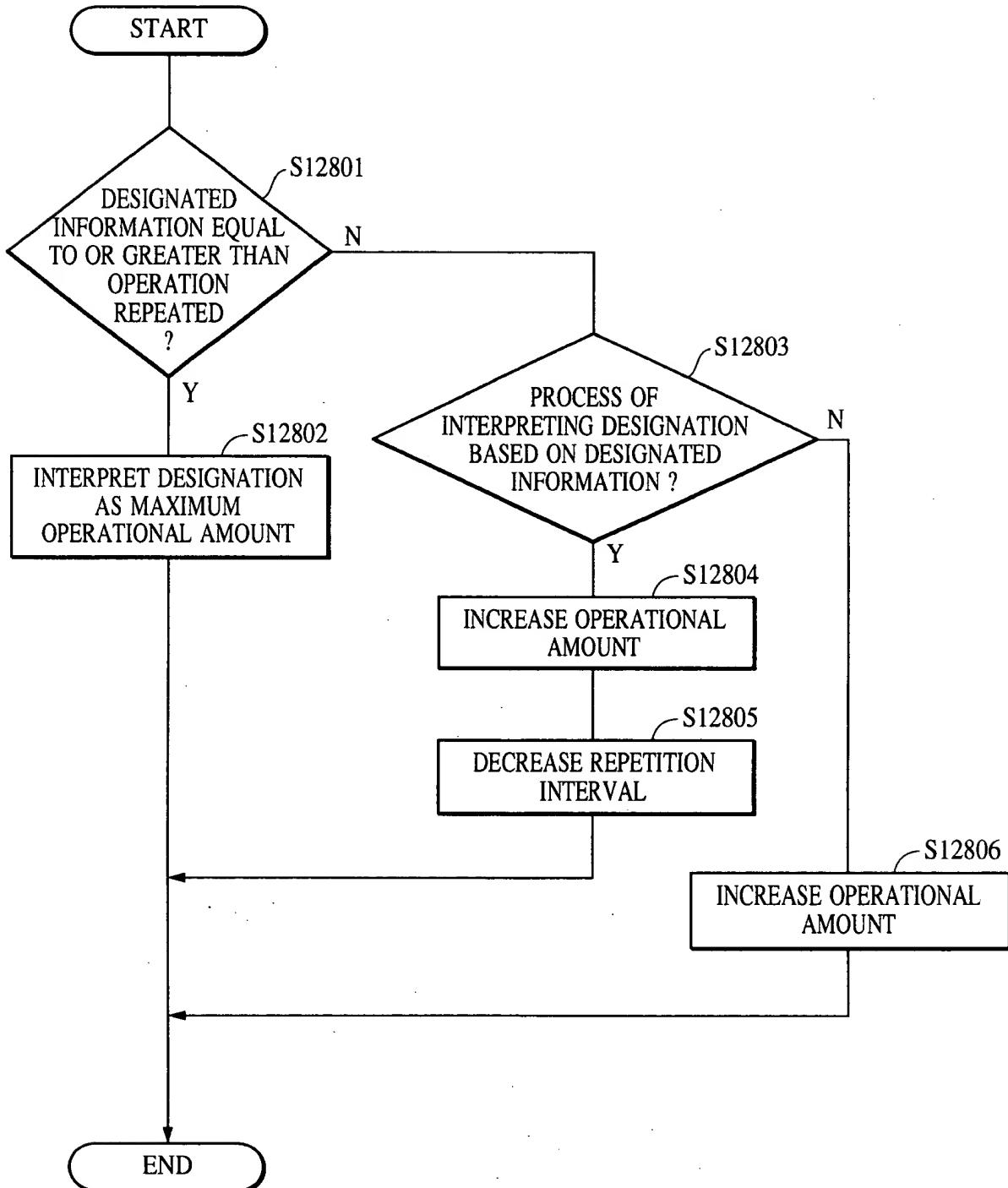


FIG. 128

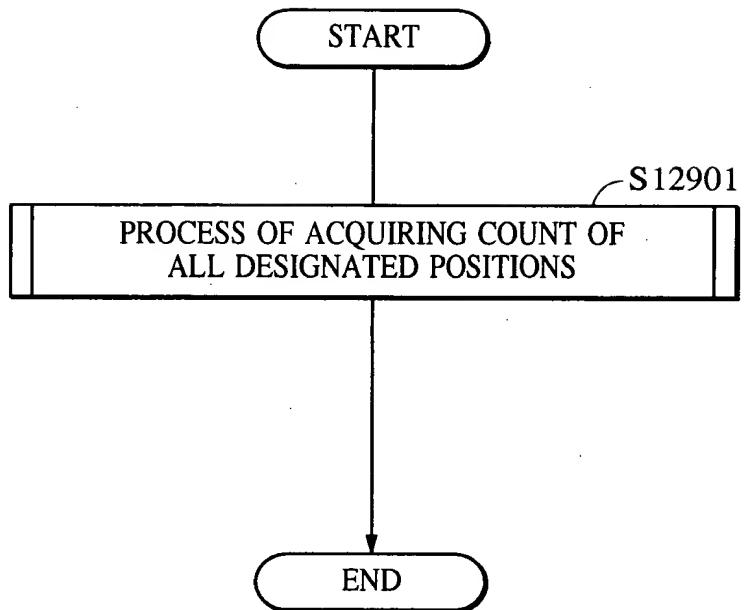


FIG. I29

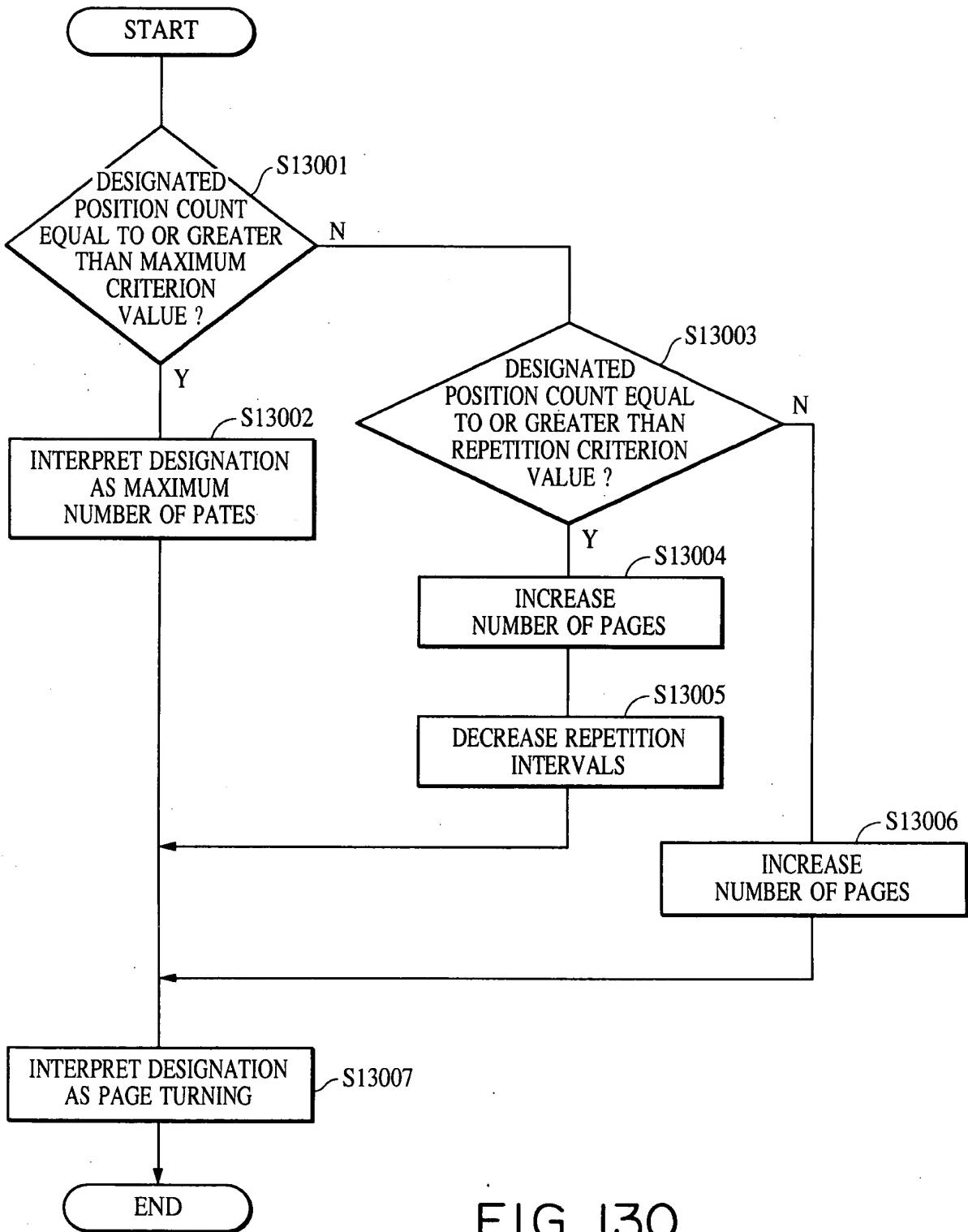


FIG. 130

PAGE TURNING

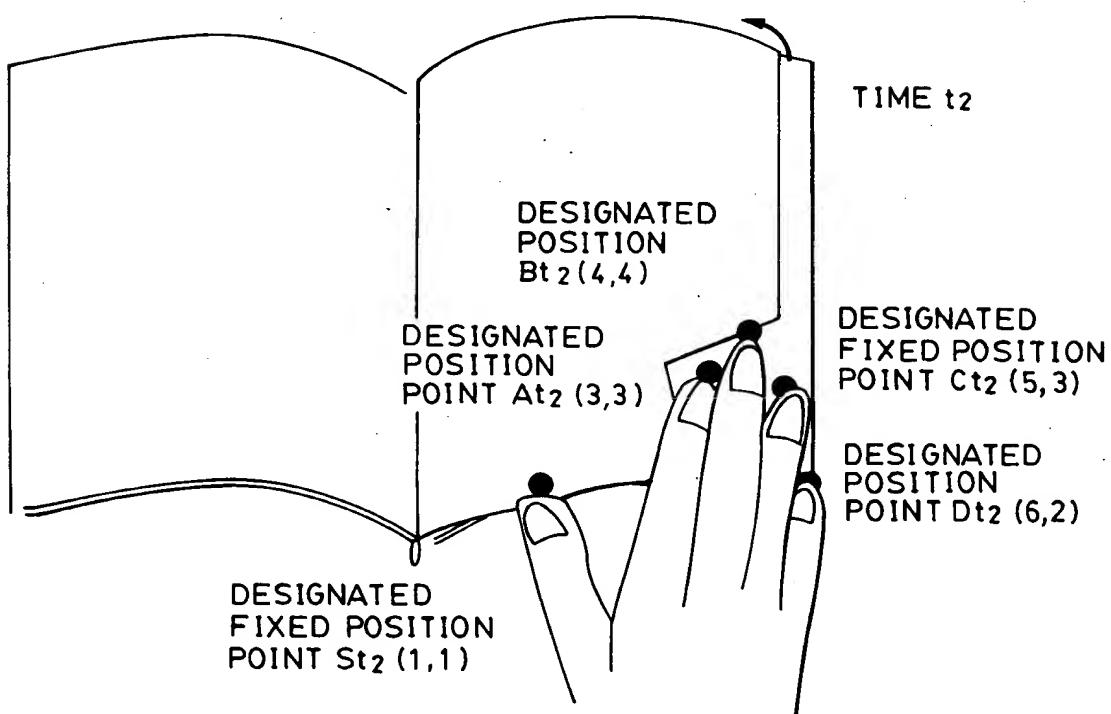
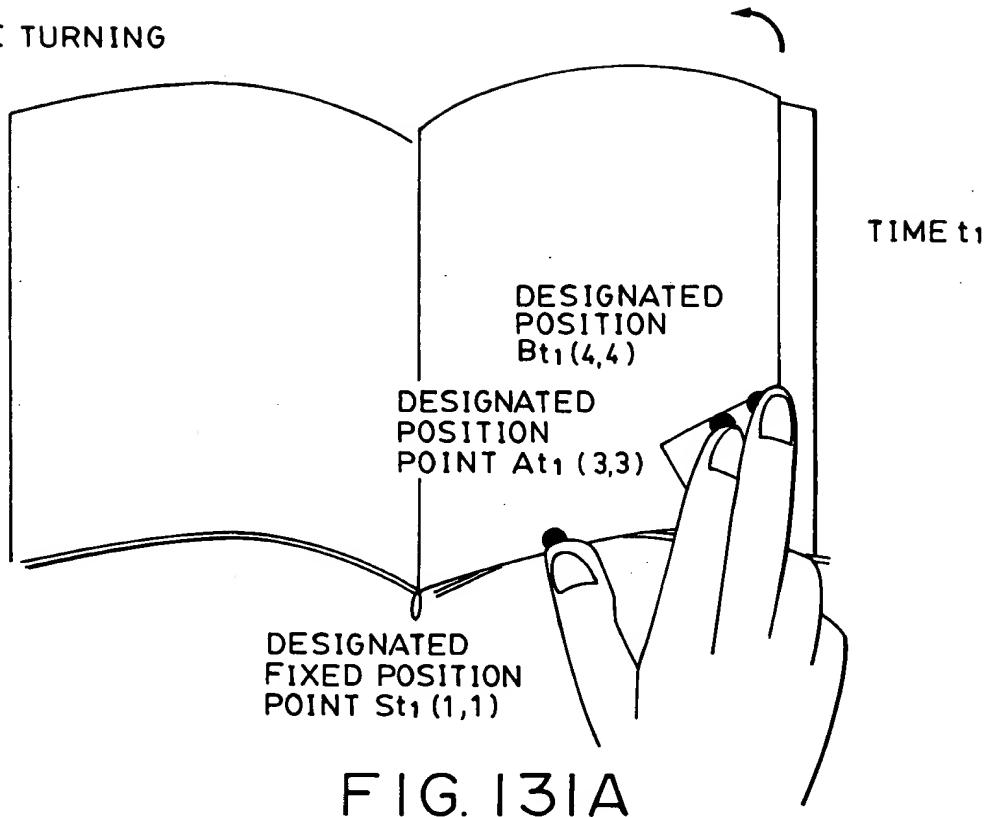


FIG. 131B

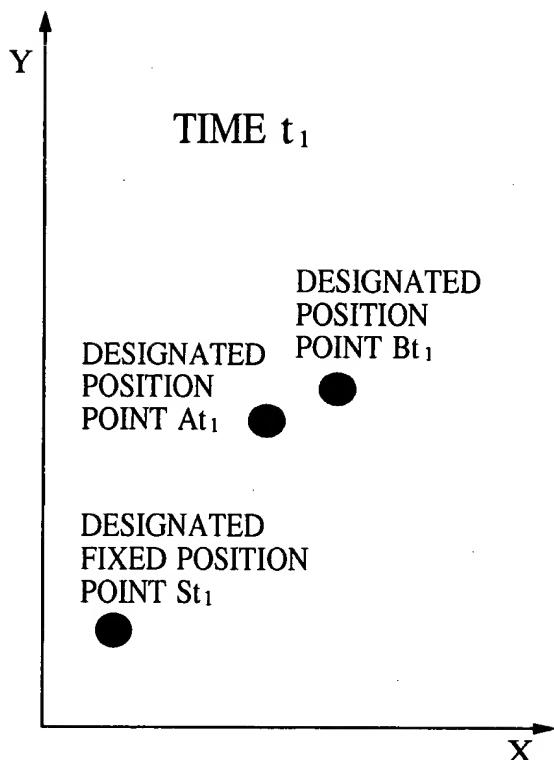


FIG. I32A

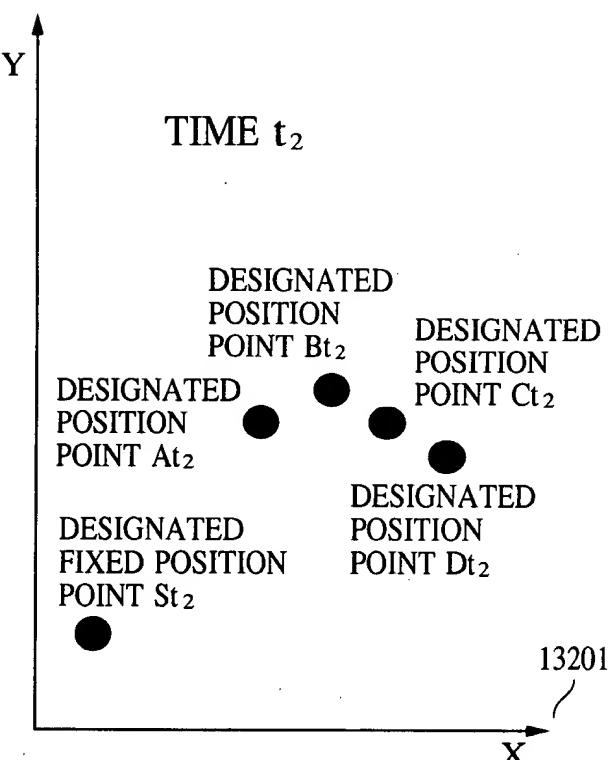


FIG. I32B

DESIGNATED
FIXED POSITION
POSITION DATA
OF POINT S

	S_x	S_y
t_1	1.0	1.0
t_2	1.0	1.0

DESIGNATED
POSITION
POSITION DATA
OF POINT A

	A_x	A_y
t_1	3.0	3.0
t_2	3.0	3.0

DESIGNATED
POSITION
POSITION DATA
OF POINT B

	B_x	B_y
t_1	4.0	4.0
t_2	4.0	4.0

DESIGNATED
POSITION
POSITION DATA
OF POINT C

	C_x	C_y
t_1		
t_2	5.0	3.0

DESIGNATED
POSITION
POSITION DATA
OF POINT D

	D_x	D_y
t_1		
t_2	6.0	2.0

13202

FIG. I32C

FIG. I32D

FIG. I32E

FIG. I32F

FIG. I32G

DATA OF DESIGNATED POSITION COUNT

13203

	INCREASE IN NUMBER	TOTAL NUMBER
t_1	2	3
t_2	2	5

FIG. I32H

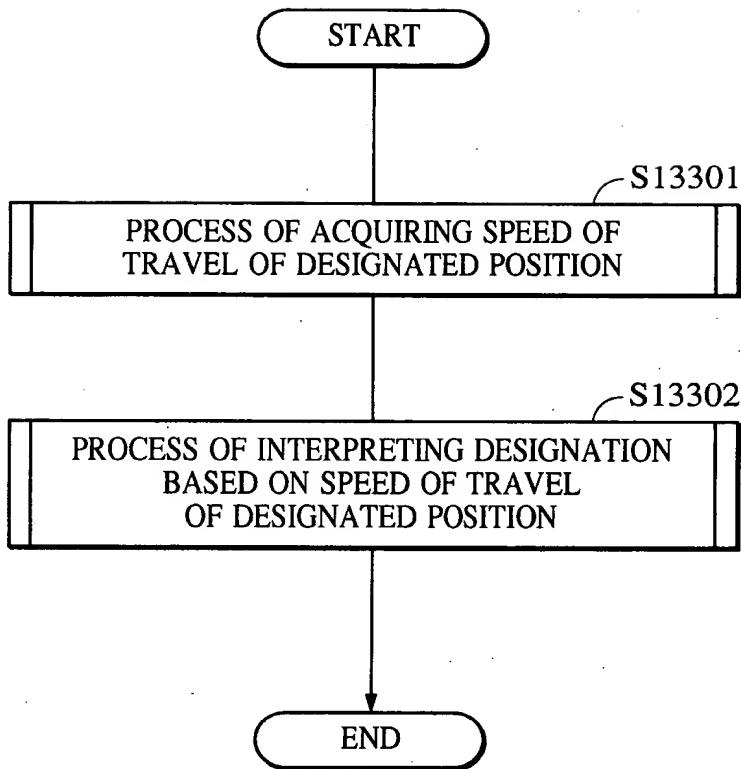


FIG. 133

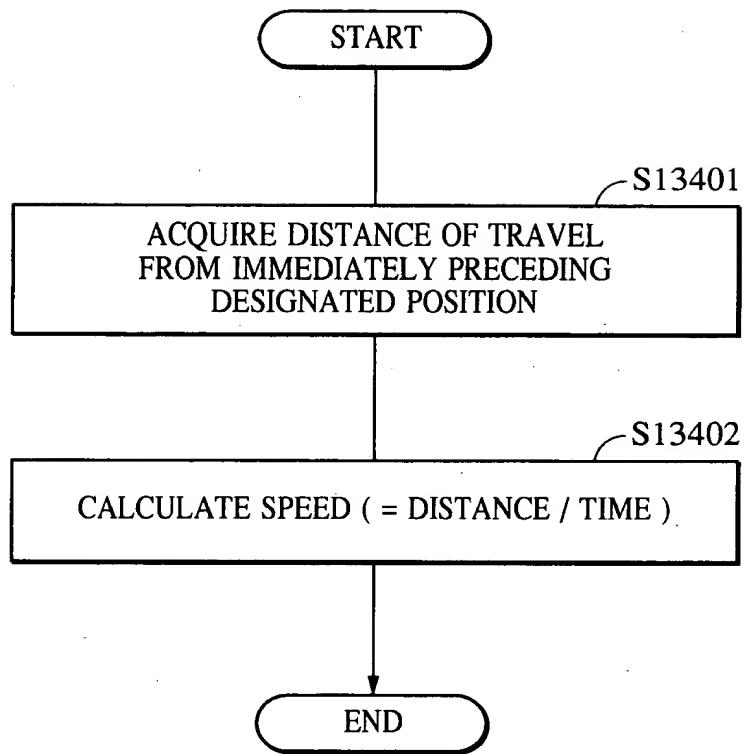


FIG. 134

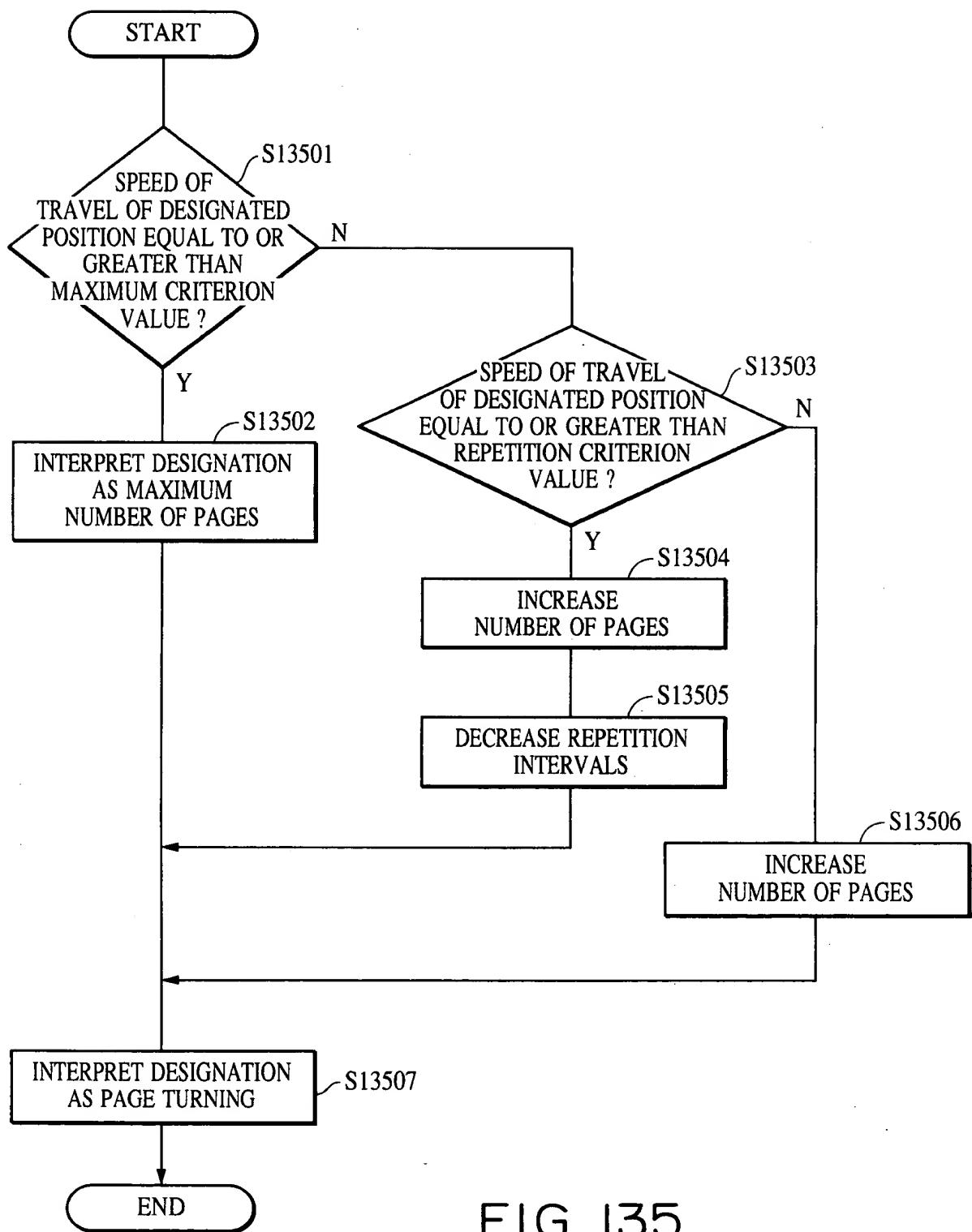


FIG. I35

PAGE TURNING

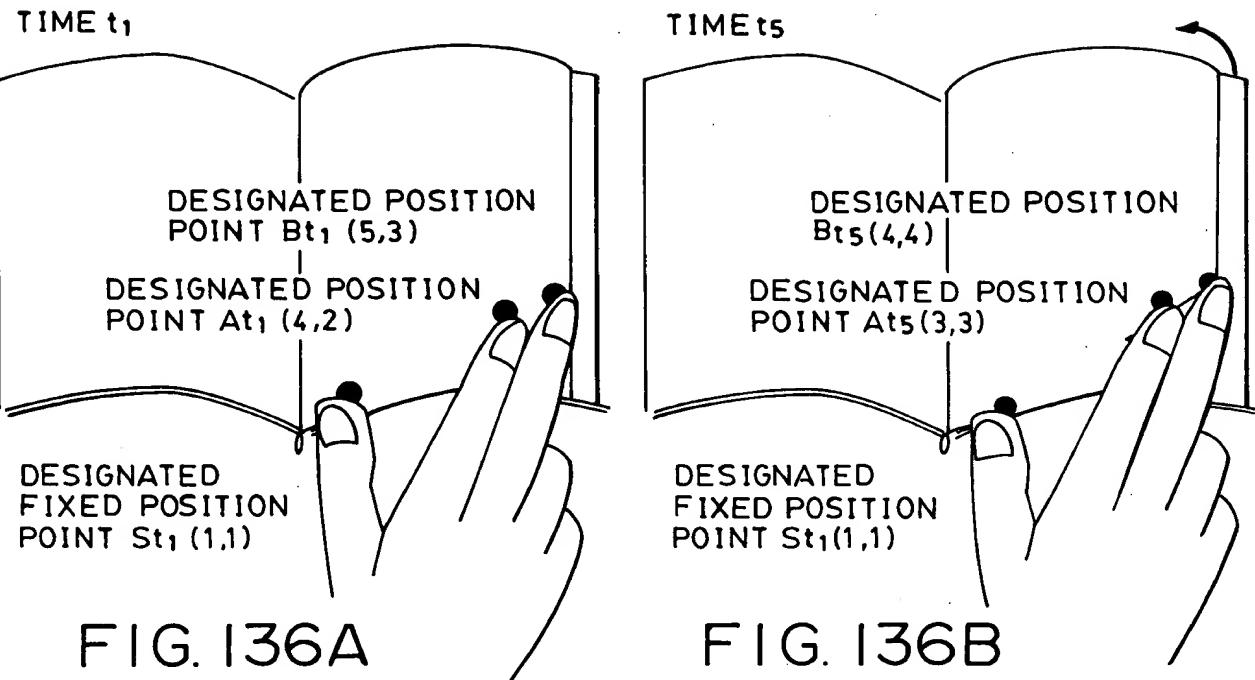


FIG. 136A

FIG. 136B

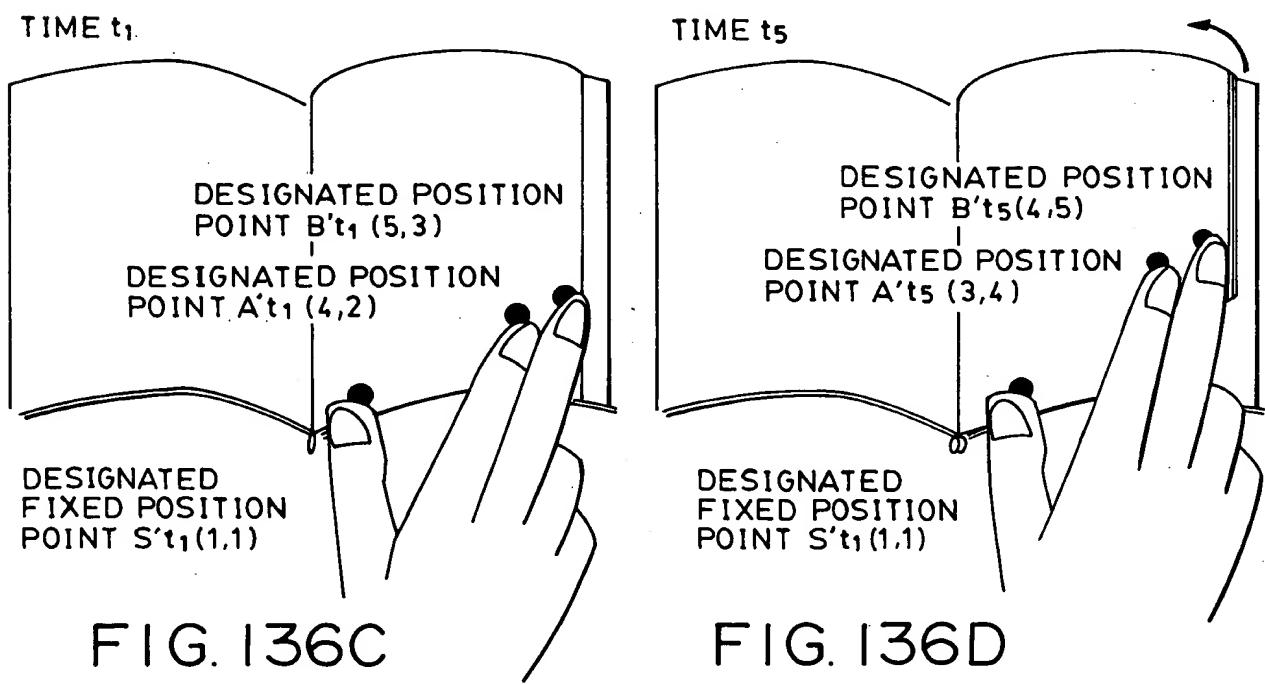


FIG. 136C

FIG. 136D

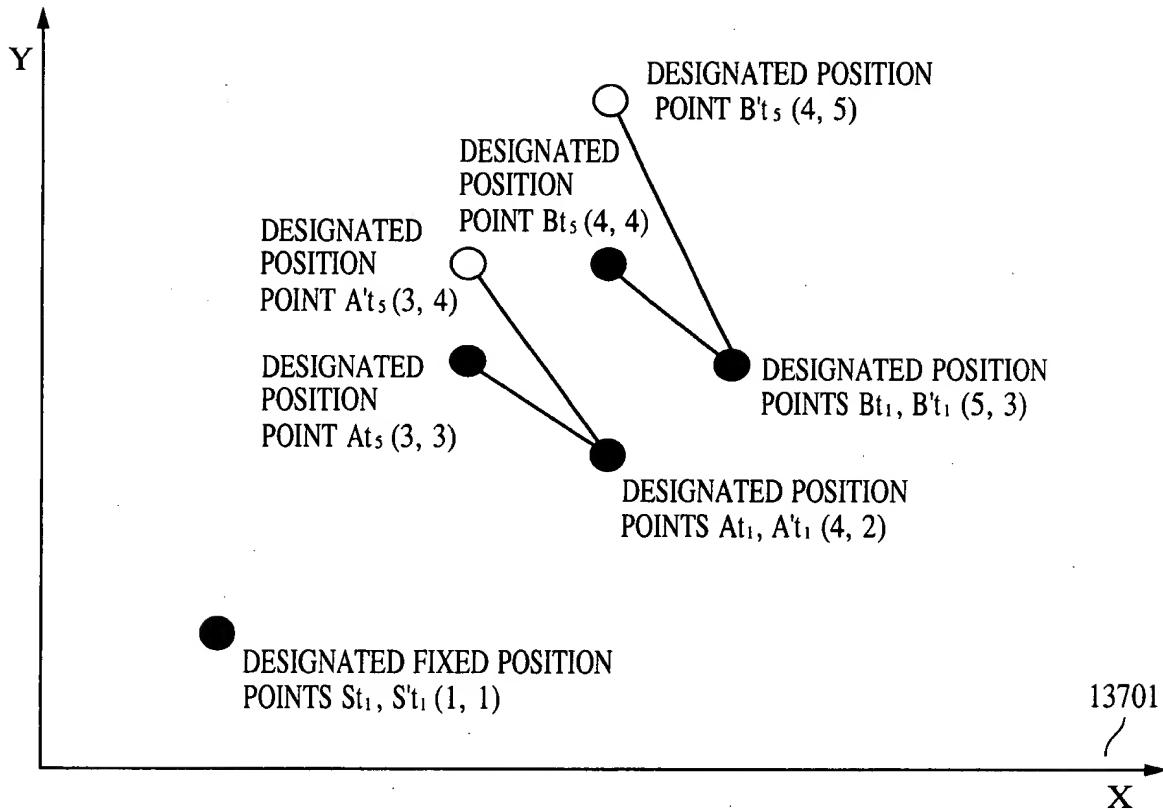


FIG. 137A

DESIGNATED
FIXED POSITION
POSITION DATA
OF POINT S

	S _x	S _y	A _x	A _y
t ₁	1.0	1.0	4.0	2.0
t ₂	1.0	1.0	3.8	2.2
t ₃	1.0	1.0	3.6	2.4
t ₄	1.0	1.0	3.4	2.6
t ₅	1.0	1.0	3.0	3.0

DESIGNATED
POSITION
POSITION DATA
OF POINT A

	B _x	B _y	A' _x	A' _y
t ₁	5.0	3.0	4.0	2.0
t ₂	4.8	3.2	3.8	2.4
t ₃	4.6	3.4	3.6	2.8
t ₄	4.4	3.6	3.4	3.2
t ₅	4.0	4.0	3.0	4.0

FIG. I37B FIG. I37C

FIG. I37D FIG. I37E FIG. I37F

DESIGNATED
POSITION
POSITION DATA
OF POINT B'

	B' _x	B' _y
t ₁	5.0	3.0
t ₂	4.8	3.2
t ₃	4.6	3.4
t ₄	4.4	3.6
t ₅	4.0	4.0

DATA OF SPEED OF TRAVEL OF DESIGNATED POSITION

	SPEED OF POINT A OF SPEED OF POINT A'	RATE OF SPEED OF POINT B OF SPEED OF POINT B'	SPEED OF POINT A'	RATE OF INCREASE OF SPEED OF POINT B OF SPEED OF POINT B'	SPEED OF POINT B'	RATE OF INCREASE OF SPEED OF POINT B' OF SPEED OF POINT B'
t ₁	0.000	0.000	0.0	0.000	0.000	
t ₂	0.283	0.283		0.447	0.447	
t ₃	0.283	1.00	0.283	1.00	0.447	1.00
t ₄	0.283	1.00	0.283	1.00	0.447	1.00
t ₅	0.354	1.25	0.283	1.00	0.559	1.25

13703

FIG. I37G

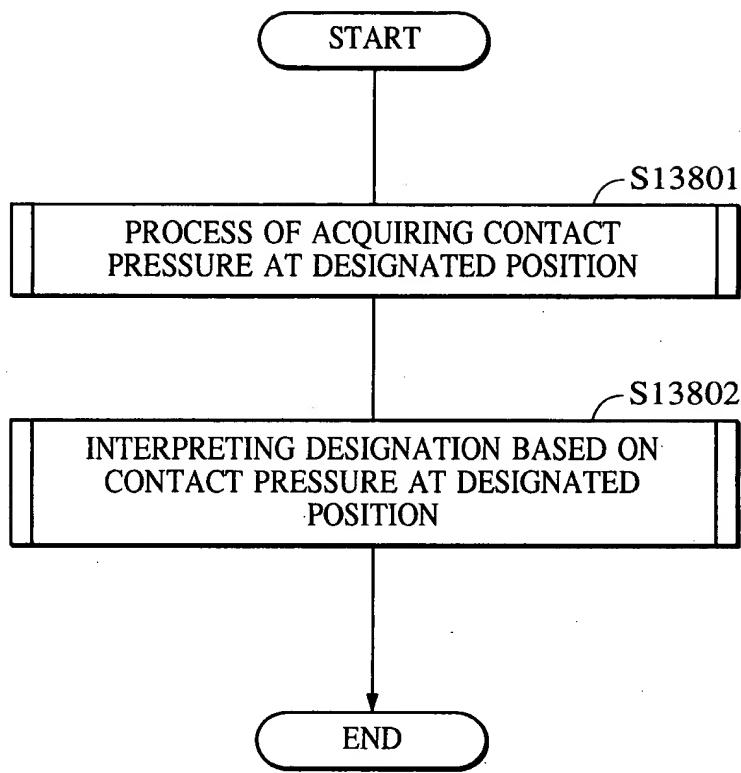


FIG. 138

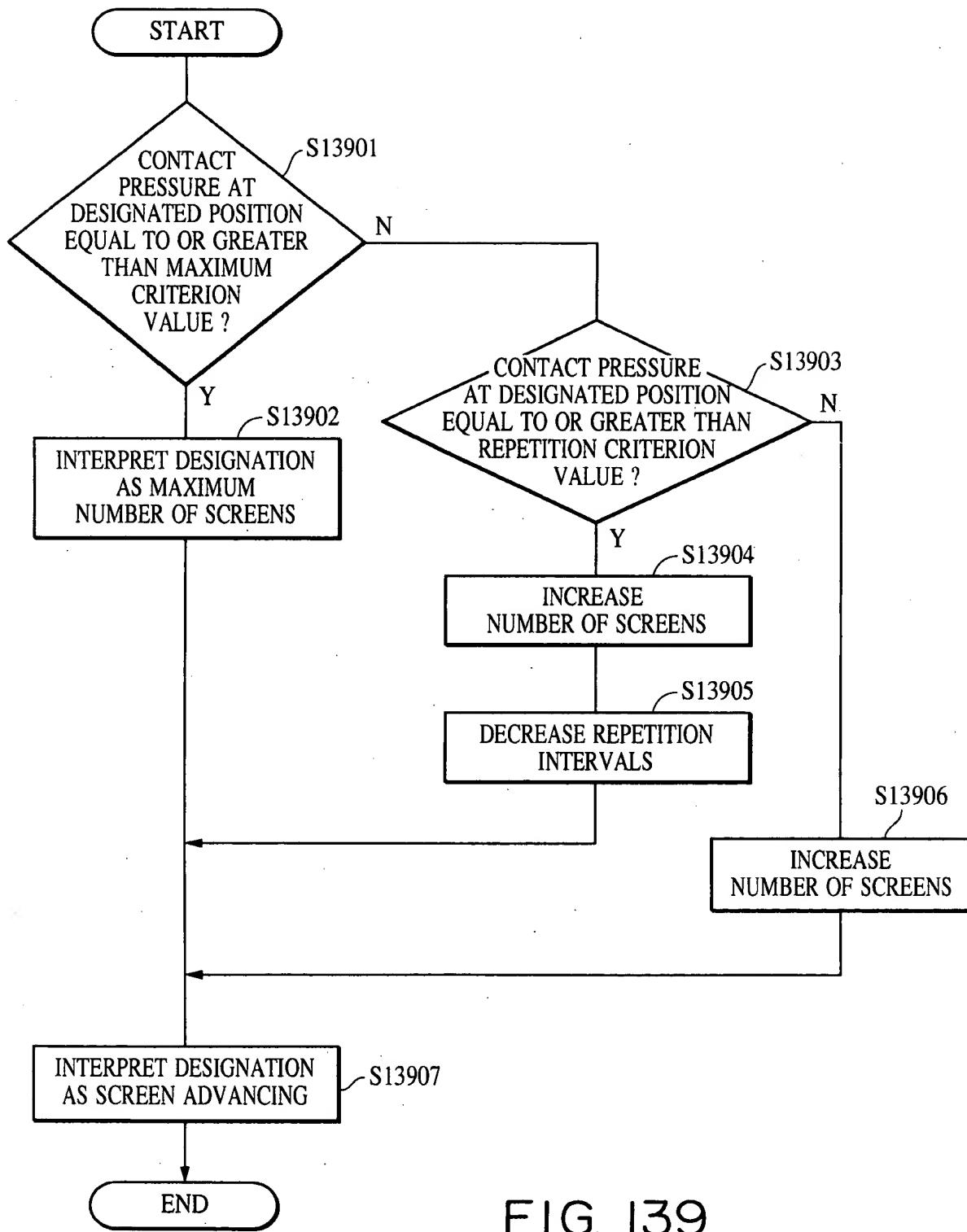


FIG. 139

SCREEN SHIFTING

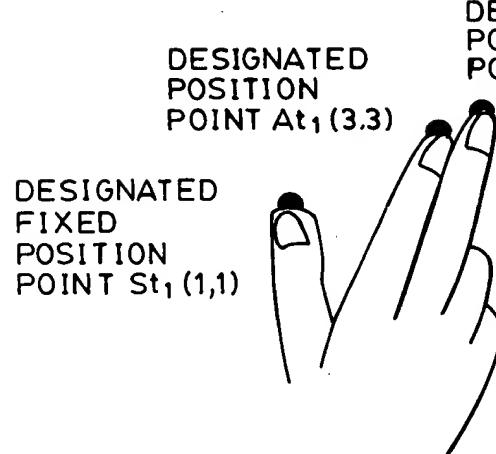


FIG. 140A

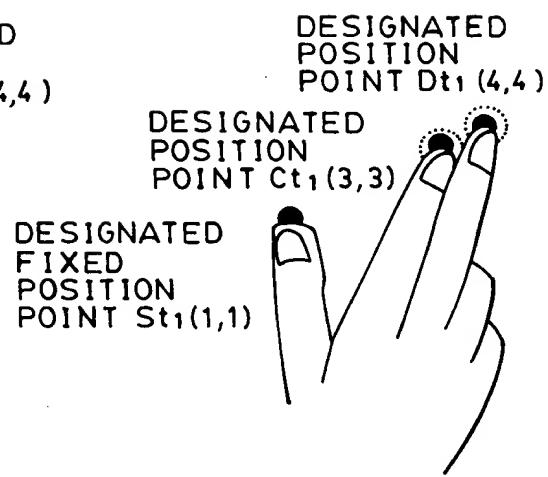


FIG. 140C

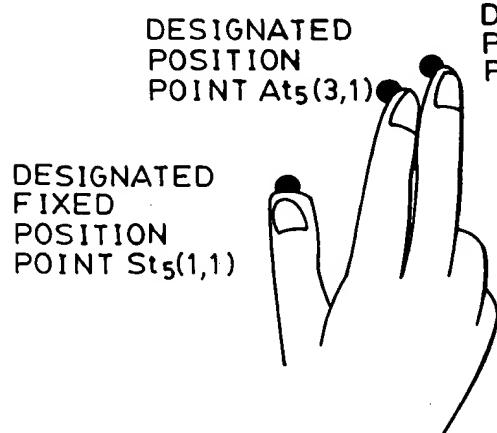


FIG. 140B

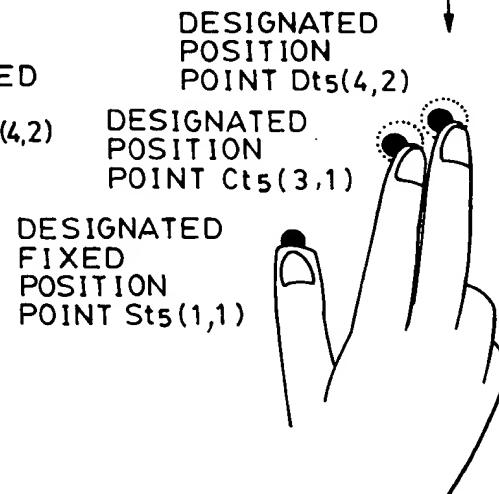


FIG. 140D

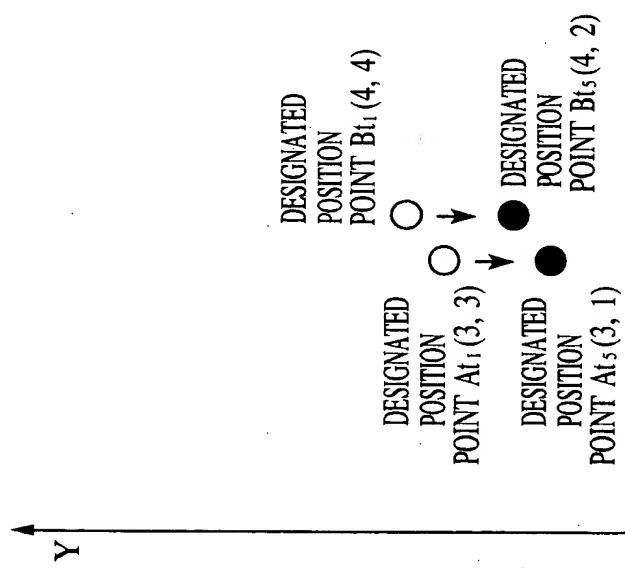


FIG. 14 IA

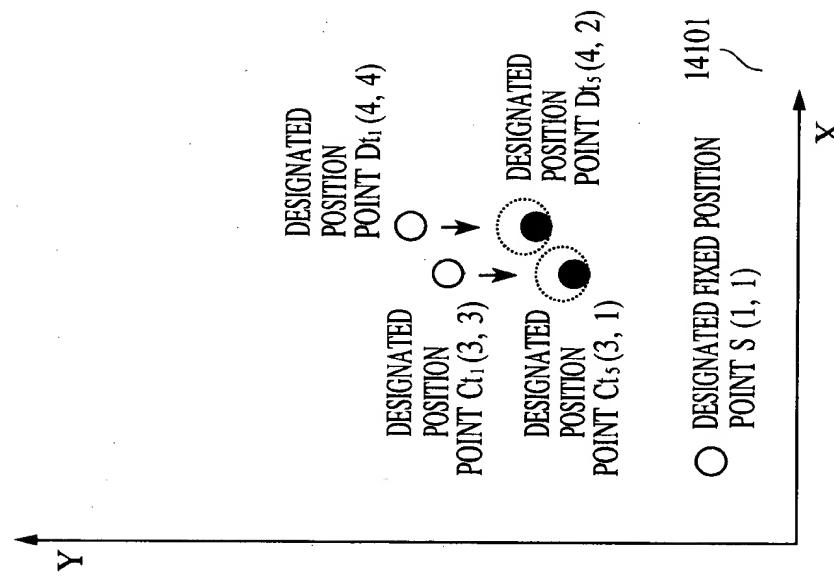


FIG. 14 IB

DESIGNATED POSITION DATA OF POINT S		DESIGNATED POSITION DATA OF POINT A		DESIGNATED POSITION DATA OF POINT B		DESIGNATED POSITION DATA OF POINT C		DESIGNATED POSITION DATA OF POINT D	
S _x	S _y	A _x	A _y	B _x	B _y	C _x	C _y	D _x	D _y
t ₁	1.0	3.0	3.0	t ₁	4.0	4.0	t ₁	3.0	3.0
t ₂	1.0	3.0	2.6	t ₂	4.0	3.6	t ₂	3.0	2.6
t ₃	1.0	3.0	2.2	t ₃	4.0	3.2	t ₃	3.0	2.2
t ₄	1.0	3.0	1.8	t ₄	4.0	2.8	t ₄	3.0	1.8
t ₅	1.0	3.0	1.0	t ₅	4.0	2.0	t ₅	3.0	1.0

FIG. 14IC FIG. 14ID

FIG. 14IE FIG. 14IF FIG. 14IG

DATA OF CONTACT PRESSURE AT DESIGNATED POSITION

	CONTACT PRESSURE AT POINT S	CONTACT PRESSURE AT POINT A	CONTACT PRESSURE AT POINT B	CONTACT PRESSURE AT POINT C	CONTACT PRESSURE AT POINT D
t ₁	100	100	100	100	100
t ₂	105	105	105	140	140
t ₃	110	110	110	160	160
t ₄	105	105	105	190	190
t ₅	100	100	100	210	210

14I03

FIG. 14IH

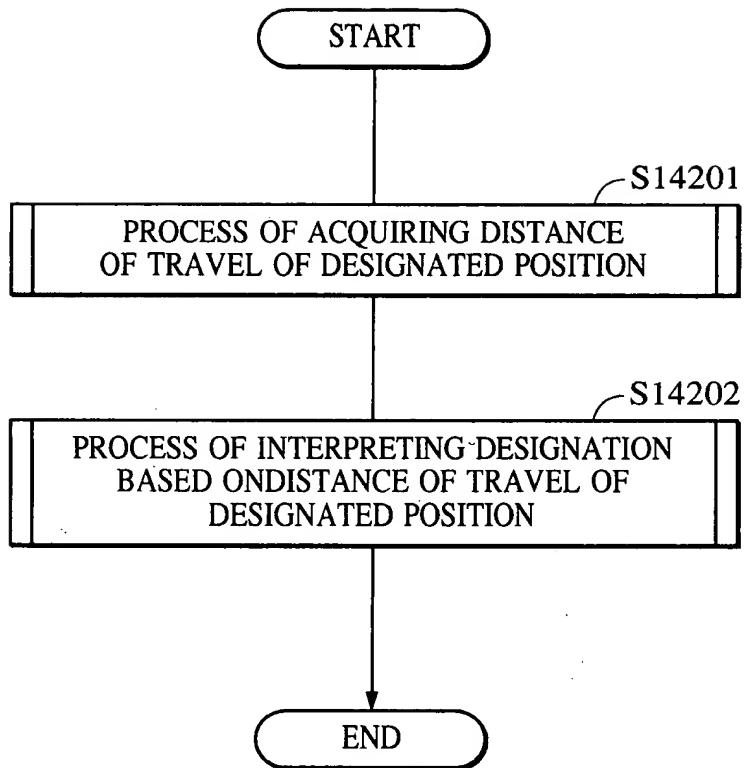


FIG. I42

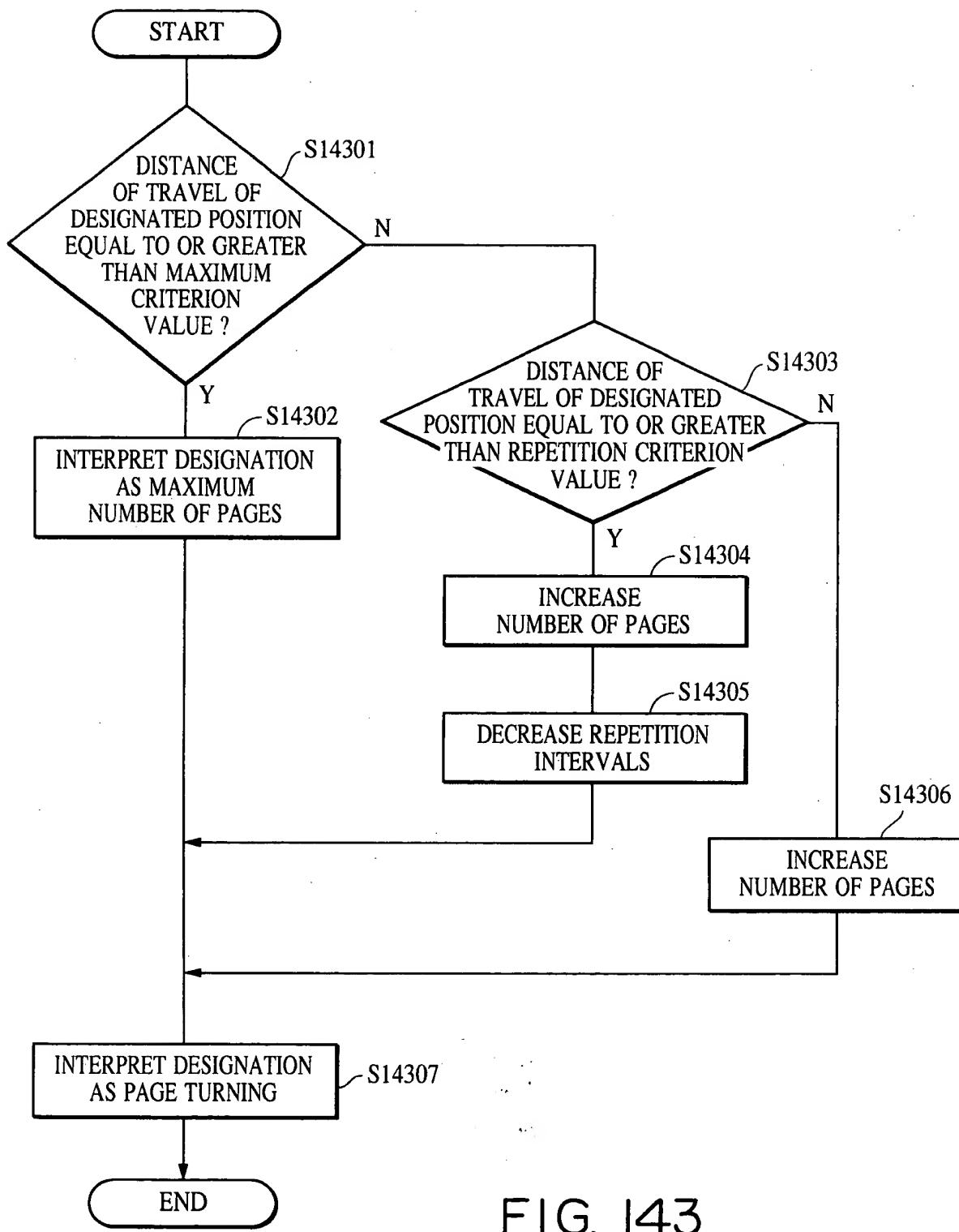


FIG. I43

PAGE TURNING

TIME t_1

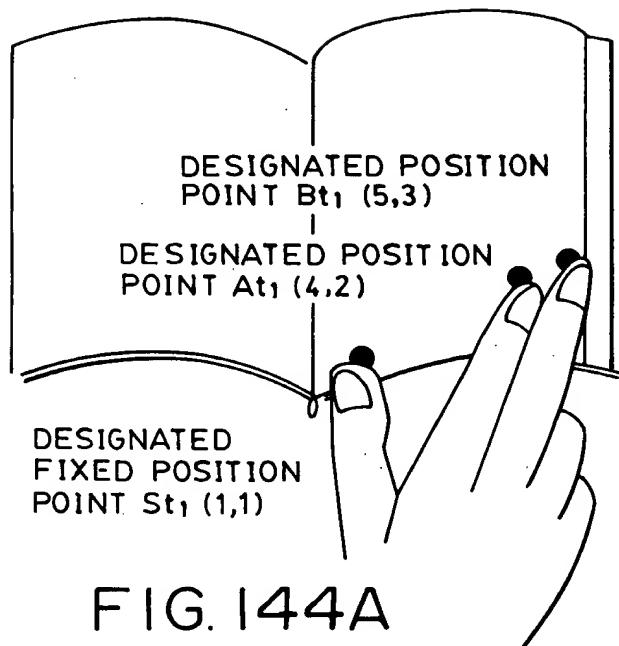


FIG. 144A

TIME t_5

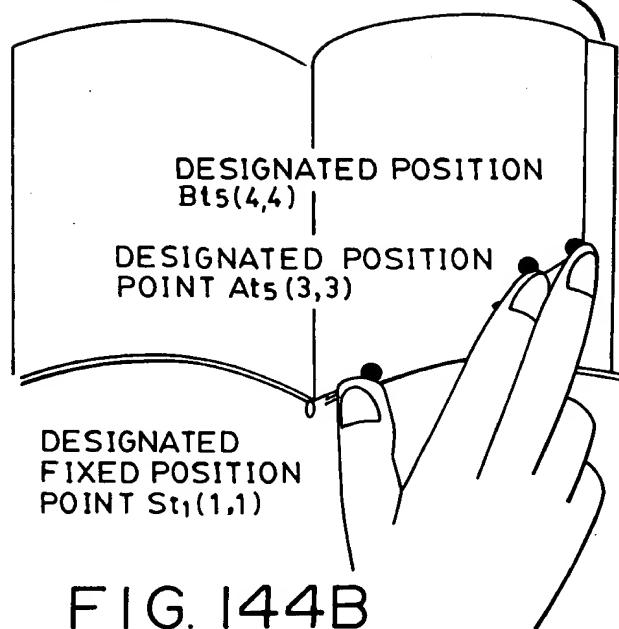


FIG. 144B

TIME t_1

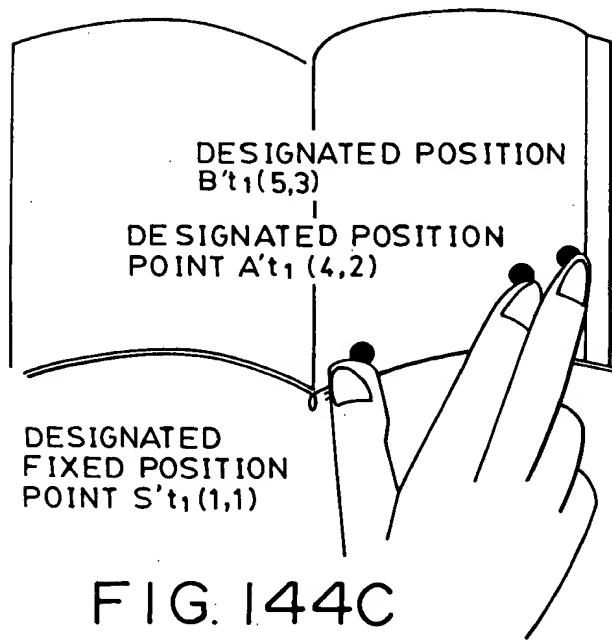


FIG. 144C

TIME t_5

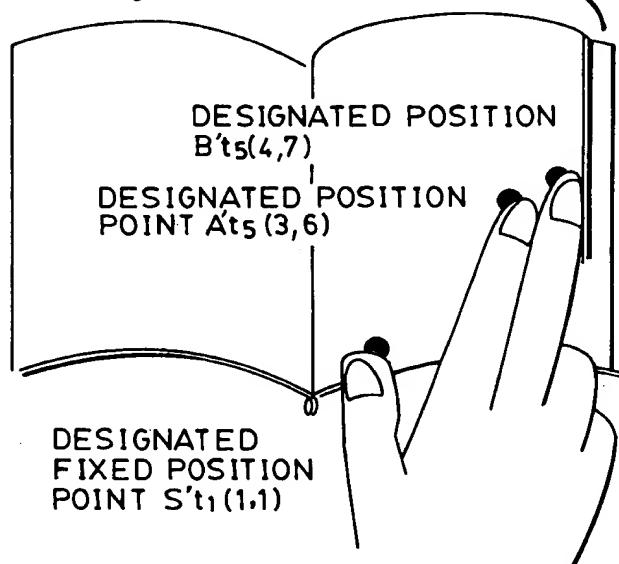


FIG. 144D

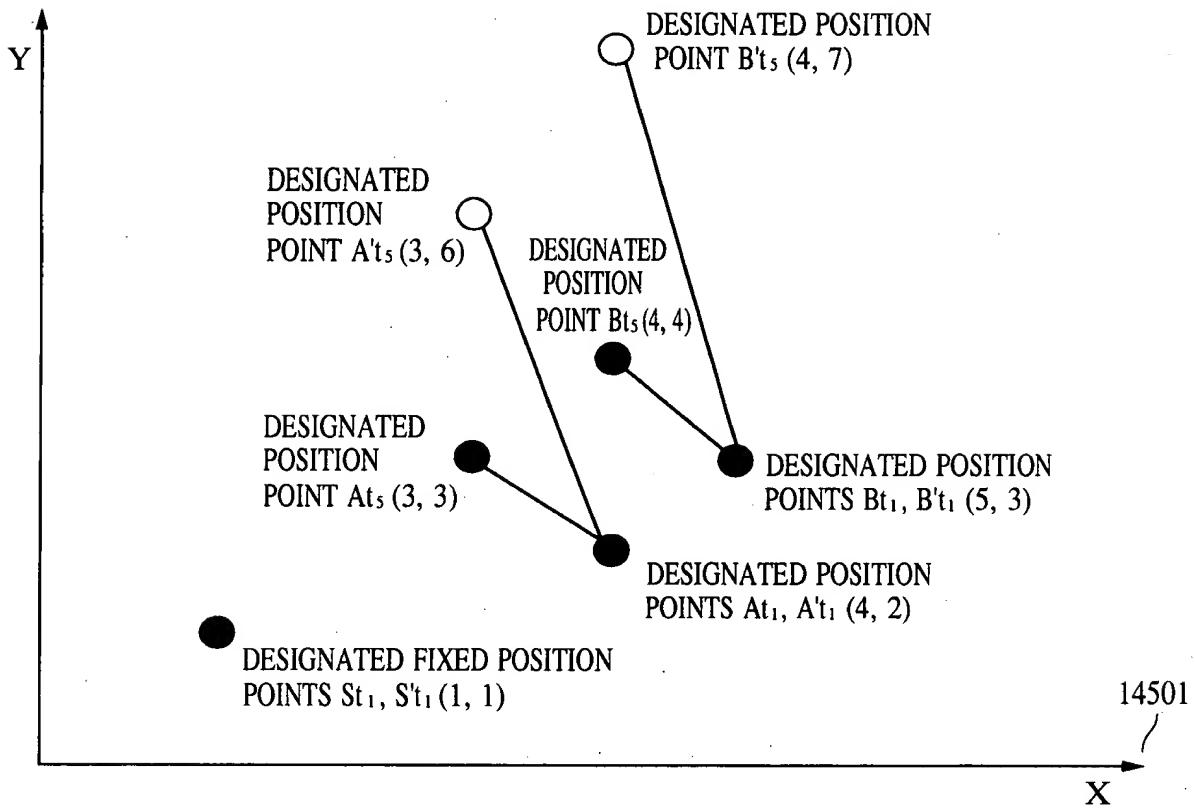


FIG. 145A

	DESIGNATED POSITION DATA OF POINT S		DESIGNATED POSITION DATA OF POINT A		DESIGNATED POSITION DATA OF POINT B		DESIGNATED POSITION DATA OF POINT A'		DESIGNATED POSITION DATA OF POINT B'	
	S _x	S _y	A _x	A _y	B _x	B _y	A' _x	A' _y	B' _x	B' _y
t ₁	1.0	1.0	4.0	2.0	5.0	3.0	4.0	2.0	5.0	3.0
t ₂	1.0	1.0	3.8	2.2	4.8	3.2	3.8	2.8	4.8	3.8
t ₃	1.0	1.0	3.6	2.4	4.6	3.4	3.6	3.6	4.6	4.6
t ₄	1.0	1.0	3.4	2.6	4.4	3.6	3.4	4.4	4.4	5.4
t ₅	1.0	1.0	3.0	3.0	4.0	4.0	3.0	6.0	4.0	7.0

FIG. 145B FIG. 145C FIG. 145D FIG. 145E FIG. 145F

DATA OF DISTANCE OF TRAVEL OF DESIGNATED POSITION				
TRAVEL OF POINT S	TRAVEL OF POINT A	TRAVEL OF POINT B	TRAVEL OF POINT A'	TRAVEL OF POINT B'
t ₁	0	0.000	0.000	0.000
t ₂	0	0.283	0.283	0.825
t ₃	0	0.566	0.566	1.649
t ₄	0	0.849	0.849	2.474
t ₅	0	1.414	1.131	4.123

FIG. 145G

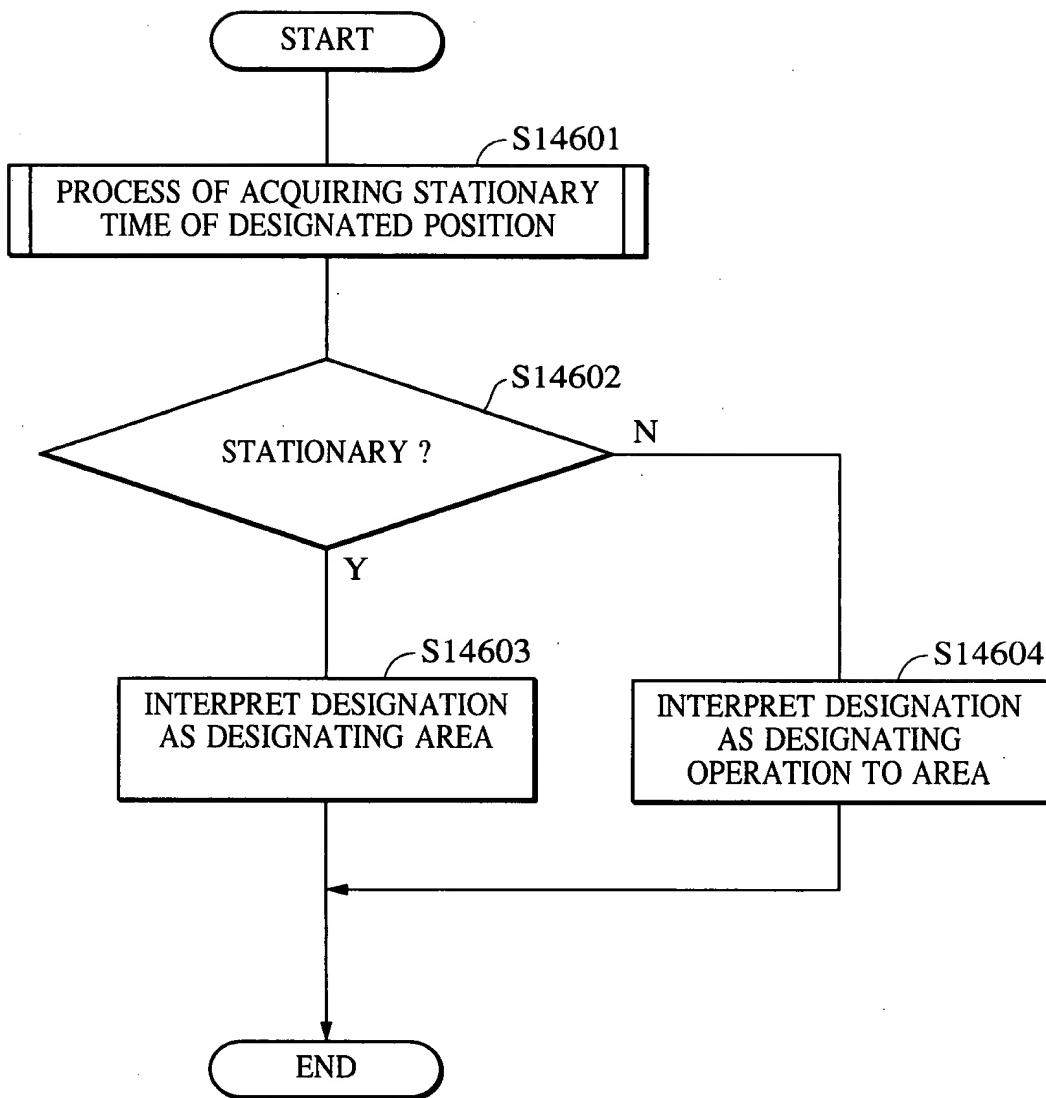


FIG. I46

DESIGNATING
AREA

DESIGNATED
POSITION
POINT At₁

DESIGNATED
POSITION
POINT Bt₁

TIME t₁

In a system for preparing a text by using a knowledge base, knowledge relating to input information is first retrieved from the knowledge base. The plurality of kinds of information used as elements of the text to be generated is selected from the input information and the retrieved information relating thereto. Subsequently, a describing order, in which the selected elements of the text are described, is determined. The output is generated on the basis of the selected elements of the text and the determined describing order.

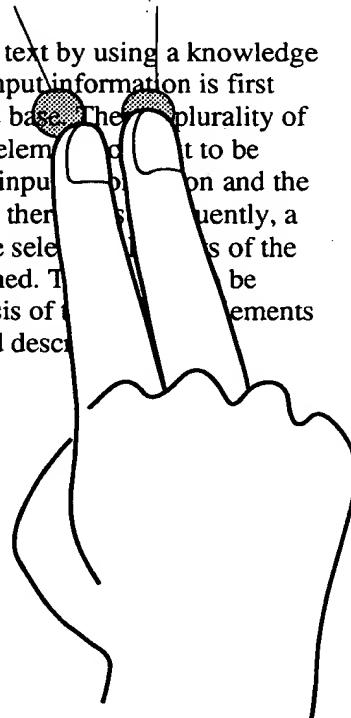


FIG. 147A

DESIGNATED
POSITION
POINT At₅

DESIGNATED
POSITION
POINT Bt₅

TIME t₅

In a system for preparing a text by using a knowledge base, knowledge relating to input information is first retrieved from the knowledge base. The plurality of kinds of information used as elements of the text to be generated is selected from the input information and the retrieved information relating thereto. Subsequently, a describing order, in which the selected elements of the text are described, is determined. The output is generated on the basis of the selected elements of the text and the determined describing order.

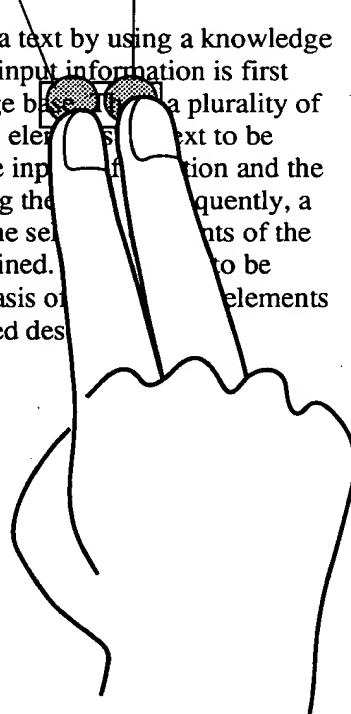


FIG. 147B

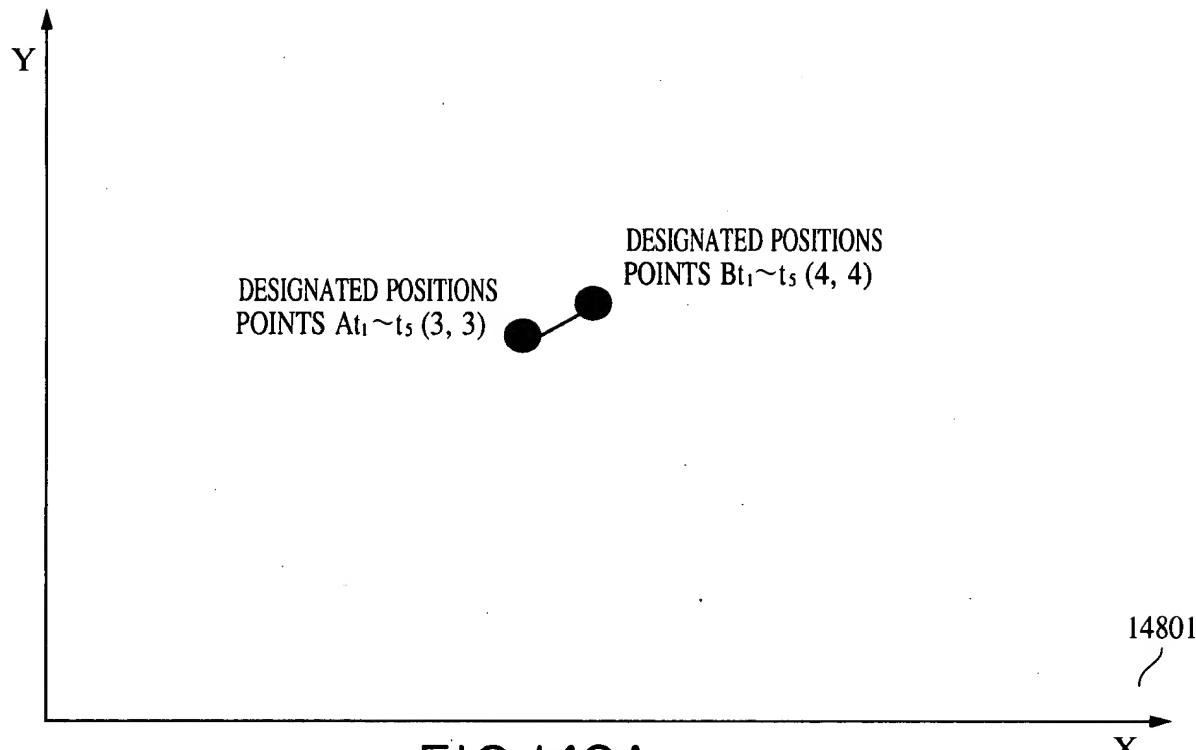


FIG. 148A

DESIGNATED
FIXED POSITION
POSITION DATA
OF POINT A

	A_x	A_y
t_1	3.0	3.0
t_2	3.0	3.0
t_3	3.0	3.0
t_4	3.0	3.0
t_5	3.0	3.0

DESIGNATED
FIXED POSITION
POSITION DATA
OF POINT B

	B_x	B_y
t_1	4.0	4.0
t_2	4.0	4.0
t_3	4.0	4.0
t_4	4.0	4.0
t_5	4.0	4.0

FIG. 148B

FIG. 148C

DATA OF TRAVEL OF DESIGNATED POSITION

	TRAVEL OF POINT A	TRAVEL OF POINT B
t_1	0.000	0.000
t_2	0.000	0.000
t_3	0.000	0.000
t_4	0.000	0.000
t_5	0.000	0.000

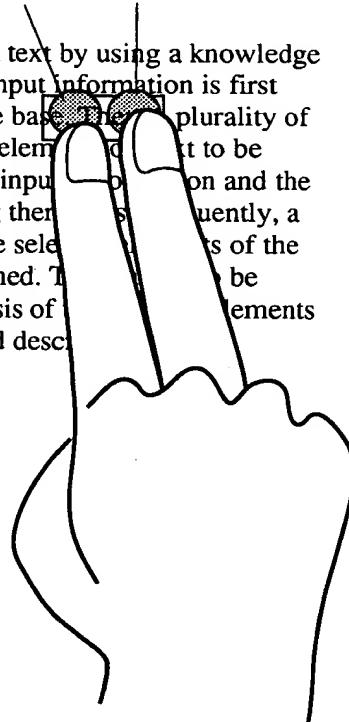
FIG. 148D

EXPANSION OPERATION

DESIGNATED POSITION POINT At₅ DESIGNATED POSITION POINT Bt₅

TIME t₅

In a system for preparing a text by using a knowledge base, knowledge relating to input information is first retrieved from the knowledge base. Then, a plurality of kinds of information used as elements of the text to be generated is selected from the input information and the retrieved information relating thereto. Subsequently, a describing order, in which the selected elements of the text are described, is determined. Then, the output is generated on the basis of the selected elements of the text and the determined describing order.



14901

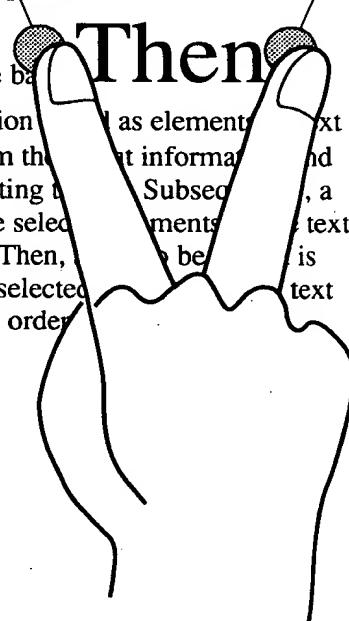
FIG. 149A

DESIGNATED POSITION POINT At₆ DESIGNATED POSITION POINT Bt₆

TIME t₆

In a system for preparing a text by using a knowledge base, knowledge relating to input information is first

retrieved from the knowledge base. Then, a plurality of kinds of information used as elements of the text to be generated is selected from the input information and the retrieved information relating thereto. Subsequently, a describing order, in which the selected elements of the text are described, is determined. Then, the output is generated on the basis of the selected elements of the text and the determined describing order.



14902

FIG. 149B

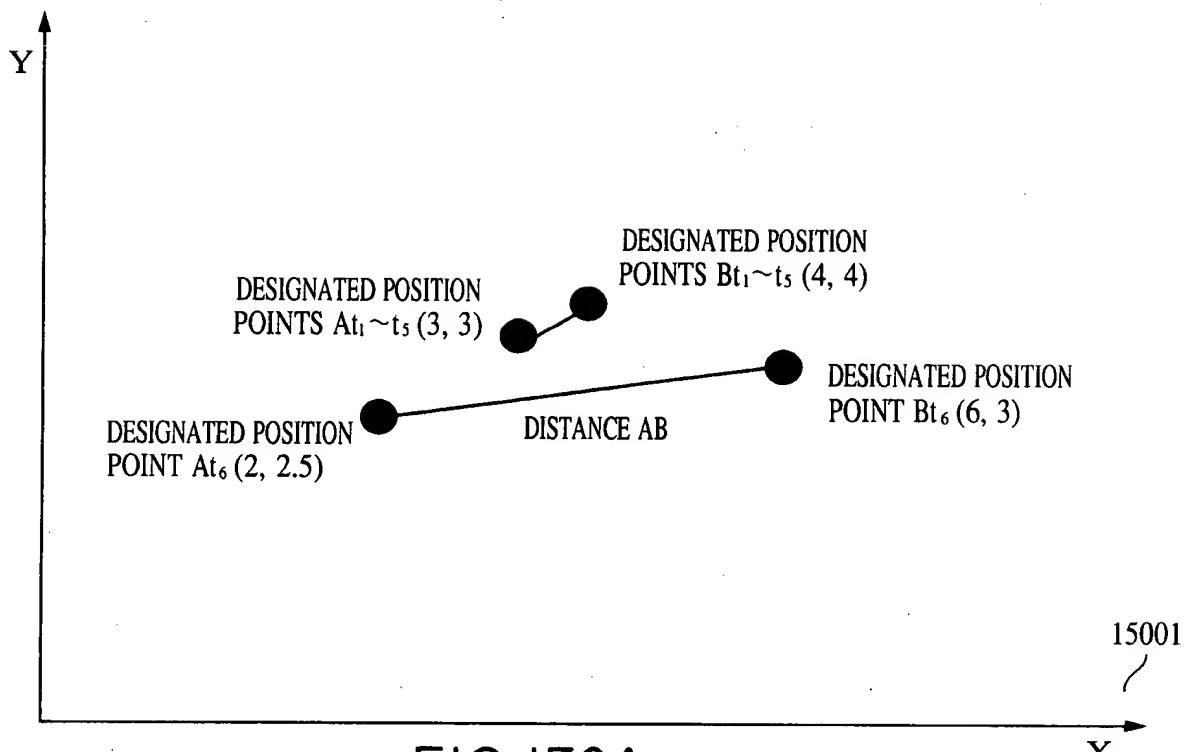


FIG. 150A

DESIGNATED
MOVING POSITION
POSITION DATA
OF POINT A

	A _x	A _y
t ₁	3.0	3.0
t ₂	3.0	3.0
t ₃	3.0	3.0
t ₄	3.0	3.0
t ₅	2.0	2.5

DESIGNATED
POSITION
POSITION DATA
OF POINT B

	B _x	B _y
t ₁	4.0	4.0
t ₂	4.0	4.0
t ₃	4.0	4.0
t ₄	4.0	4.0
t ₅	6.0	3.0

FIG. 150B

15002

FIG. 150C

DATA OF TRAVEL OF DESIGNATED POSITION

	TRAVEL OF POINT A	TRAVEL OF POINT B	DISTANCE AB	DISTANCE CHANGE RATE
t ₁	0.000	0.000	1.414	100%
t ₂	0.000	0.000	1.414	100%
t ₃	0.000	0.000	1.414	100%
t ₄	0.000	0.000	1.414	100%
t ₅	1.118	2.236	4.031	285%

15003

FIG. 150D